Spelling and Morphology:
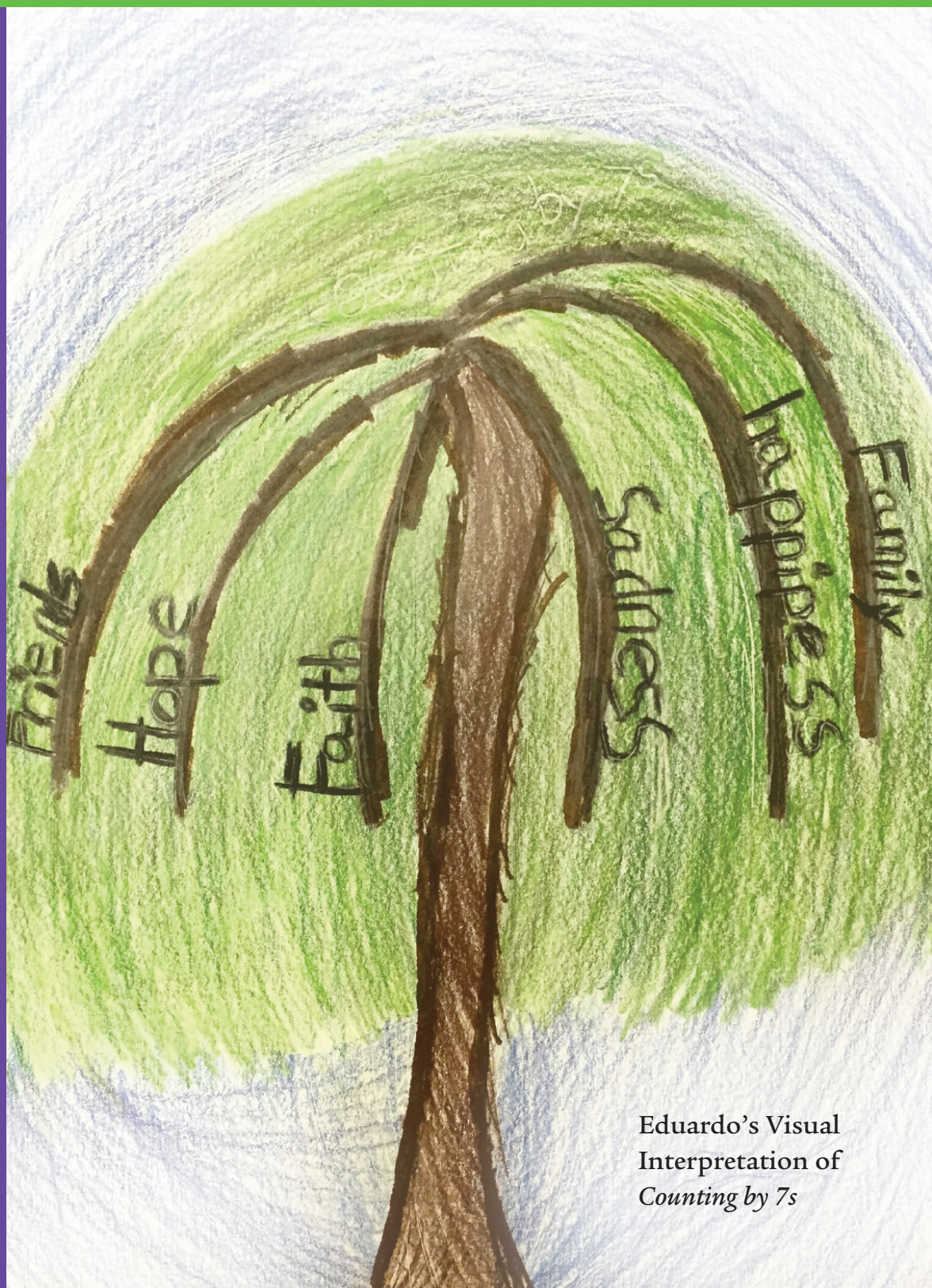**Keys to Vocabulary Instruction and Learning**
by Shane Templeton

Studio Shoes and Moo Puns:
An Inside Look at the Life and Work of Author and Illustrator Tom Lichtenheld
by Christine D. Kyser

Fanfiction:
Exploring In- and Out-of-School Literacy Practices
by Kelly Bahoric and Elizabeth Swaggerty

Eduardo's Visual Interpretation of *Counting by 7s*

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❧

Note From the Editors

With a bit of irony, we find ourselves writing this "Note from the Editors" for a *paper* journal on our laptops, collaborating *virtually* through Google Docs while we sit in the comfort of our own homes. Despite the quantity of time we spend reading digital compositions on various mobile devices, we still love traditionally printed text. Whether we read books and magazines because of our fondness for the the tactile feel of turning actual pages, the satisfaction of seeing our progress through the number of pages we've read, or because of our nostalgia from visiting the local library or bookstore, it's evident that while our options for reading material have increased, printed books still play a significant role in 21st century literacy.

We (Suzette, Christine, and Kim) still love to read traditionally printed material but have found a way to integrate both printed and digital pieces in our lives. Suzette has shelves of books, yet Christine has never seen Suzette leave home without her Kindle, complete with its shattered screen. I (Christine) have a good friend who previously worked in the printing business, maintaining machines that indulge our nostalgia for paper text and image. His experience is typical of an industry that is not keeping up with the modern consumer base. As circulation rates decreased, each small company was bought out by a larger regional employer, forcing him to move across the country as he chased one job after another. Ultimately, my friend threw in the towel so to speak; he left the printing business and went back to school to be a certified public accountant, confident that the crunching-numbers industry would not disseminate in his lifetime.

In this issue we strike a balance between honoring the traditional and leveraging the affordances offered by technology in 21st century classrooms. Several articles, support readers in all contexts. Michael Ford and Michael Optiz identify practices that have a high impact in their article, *Classroom Catalysts: Accelerating the Growth of ALL Readers in Differentiated Literacy Instruction*. Shane Templeton's *Spelling and Morphology: Keys to Vocabulary Instruction and Learning* pushes us to consider the connection between spelling and meaning. Two articles in this issue also explore interesting genres for students, Ryan Schaefer's *Historical Fiction: Making an Impact in the Classroom* and Dani Kachorsky's *Valuing the Visual: Tips for Teaching Graphic Novels and Comic Books*. Kelly Bahoric and Elizabeth Swaggerty's *Fanfiction: Exploring In- and Out-of-School Literacy Practices*, Mia Kim Williams' *Augmented Reality Apps in Teaching and Learning,* and Lindsey Schulz's *Mobilize!* use technology to transform instruction. Children's author Tom Lichtenheld takes us behind the scenes for a sneak peak into his writing process and daily life with this interview by Christine Kyser. Robin Duran and her first graders share their reviews for some of their favorite books, and Kimberli Bontempo and Allie Kaiser interviewed fifth graders for their opinions on *Counting by 7s* by Holly Sloan. Michael Ford offers a song about recess duty, and Amy Nicholl closes out the issue getting us geared up for the 2016 CCIRA annual conference.

As our circulation of more than 1,800 readers receives this paper journal in their mailboxes, we hope you enjoy turning each page just as much as we enjoy writing and designing them.

Happy Summer!

Suzette Youngs

Christine Kyser
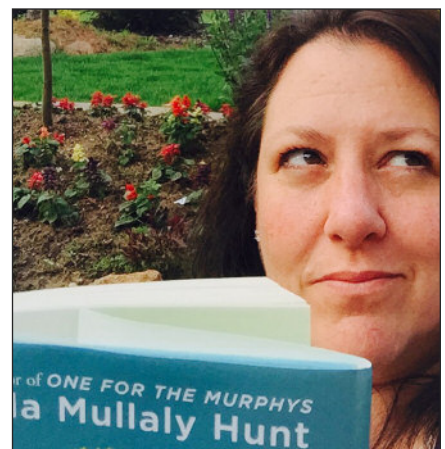
Kimberli Bontempo

Call for Manuscripts

The *Colorado Reading Journal* is a peer-reviewed journal of the Colorado Council International Reading Association. The *Journal* is published in the winter and summer of each year. The *Journal* publishes articles that address topics, issues, and events of interest and value to teachers, specialists, and administrators involved in literacy education at all levels. The *Journal* seeks submissions for the categories below.

- **Departments (1,000–2,500 words in length, not including references):** These shorter articles should offer specific classroom practices that are grounded in research and can easily be implemented by readers. Submit to any of the following departments:
  - Songs & Poetry
  - Instructional Ideas to Support Diverse Learners
  - Children's and Young Adult Literature in the Classroom
  - Digital Literacies and Innovative Classroom Practices
  - Effective Writing Instruction

- **Feature Articles (3,000–4,000 words in length, not including references):** These articles may include descriptions of instructional practices based on theory, research, and/or practical experience; research based on original investigations, commentaries on, or analyses of issues related to literacy practice; and profiles or interviews of literacy professionals, authors, and illustrators of children's books.

We are especially interested in hearing from Colorado teachers who are willing to share classroom practices and ideas on how they are dealing with and/or incorporating 191/Teacher Effectiveness, READ Act, and Common Core.

For detailed information about submitting to the *Journal*, visit CCIRA.org, click on the "Publications" tab, and then select *Colorado Reading Journal*.

Winter Duty:
A Musical Reminder to Enjoy Your Summer Vacation

MICHAEL P. FORD

This issue should reach you as you are preparing to enjoy your summer vacation—that brief period of time many long for...often as soon as the first week of the school year. No matter how long we have waited for summer vacation, we can still find ourselves complaining about this time away from school. Sometimes it seems we have difficulty enjoying the time we are currently experiencing. Alan Katz (2010) captures this from a student's perspective in his great song "School Vacation" in *Smelly Locker: Silly Dilly School Songs.* For teachers, perhaps our personal schedules keep us too busy with more running around than relaxing. Or perhaps the summer weather is too hot, too dry, too humid, or too…(you can always find a word).

Without a summer song in my repertoire, I decided to share a song about another season and its often-dreaded phenomenon called winter recess duty. I do so to remind you to enjoy your summer break because other more challenging and less desirable things are looming on the horizon. I must admit, it was winter recess duty that drove me from the elementary classroom to seek the much warmer ivory tower. Fortunately, we are never asked to supervise the recreational activities of our students at the college level. So before you complain about your summer schedule or the weather, just remember it will be over before you know it and you'll be back in school wondering again, "How many more days until summer vacation?"

♫♪ Winter Duty ♫♪
(Sung to the tune of "Send in the Clowns")

Some said it's brisk
Some said it's cold
I say you're losing your tongue
    if you lick the flag pole

Oh why does it seem
It will always freeze
When I'm on duty

Yesterday was
Sunny and bright
There wasn't a cold molecule
    anywhere in sight!
Then when I went to my bed
With the warmest of dreams
The temperature dropped
I was too cold to scream.

I'll bundle myself
From my head to my toes
I'll find the one place
Where the wind doesn't blow
I'll try to stay well
As I wait for the bell
Winter Duty
Is
HELL!

To sing along with Mike, go to https://www.youtube.com/watch?v=WwJ8-MgV_74

Michael P. Ford is a professor in and chair of the Department of Literacy and Language at the University of Wisconsin Oshkosh. Michael has been working with preservice and inservice teachers for the past 28 years. Michael is a former Title I reading and first grade teacher. He is the co-author, with Colorado's own Michael Opitz, of six books, including five published by Heinemann: Classroom Catalysts, Accessible Assessment, Do-able Differentiation, Reaching Readers, *and* Books and Beyond.

Reference
Katz, A. (2010). *Smelly locker: Silly dilly school songs.* New York: McElderry Books.

Classroom Catalysts:
Accelerating the Growth of ALL Readers in Differentiated Literacy Instruction

MICHAEL P. FORD AND MICHAEL F. OPITZ

*The authors discuss three guidelines for using classroom catalysts
to move literacy instruction closer to reaching all students.*

"Never confuse motion with action."
—*Benjamin Franklin*

Recent critiques of differentiated instruction (Roe & Egbert, 2011; Schmoker, 2010) have focused on the problem of viewing differentiation as primarily teaching practices—doing different things for different learners. This emphasis often fails to reflect intentionality and frequently results in a type of differentiated instruction that also fails to consider student needs in powerful ways. Even in our initial work (Opitz & Ford, 2008), we focused on making differentiation more "do-able." We know, however, that when the models we promoted (and still advocate) are used in a less than purpose-driven manner, they will often not benefit all readers, especially those students who need teachers' help the most. The importance of purpose-driven instruction has caused us to give more attention to an additional needed critical dimension of differentiation—*acceleration*. Instead of seeing differentiation as doing different things for different learners, acceleration recognizes that some learners will need to make more than an academic year's worth of growth in an academic year's worth of time. Acceleration requires the use of classroom catalysts that target specific things for specific learners so that they will make even greater gains (Opitz & Ford, 2014).

> *One key guiding principle for classroom catalysts is they must be considered throughout the instructional program.*

Fueling Acceleration

We recall a sign we saw at a YMCA facility: *Motion is not action!* Depending on the intensity of the exercise, one might expend more calories in the same time that someone else does with another exercise of less intensity. The same is true in literacy programs. Our use of the term *classroom catalysts* is to identify those practices that may actually pay off with greater gains, especially for students who need to make accelerated growth. We need to be much more intentional in looking at what those practices might be. Classroom catalysts focus on allowing us to get more instructional "bang for our buck."

One key guiding principle for classroom catalysts is they must be considered throughout the instructional program. When we start looking for ways to accelerate the growth of all learners in literacy programs, we need to avoid placing the burden for intervention on a small part of the school day or school week. Such a posting on a reading association hotline captured the desperation of one school: "Our district wants to improve instructional support and student learning in the areas of word learning, comprehension, decoding and fluency. Please contact me about programs that classroom teachers have implemented in your schools, specifically programs that would fit into a 30 minute intervention block 3 times per week." This is a tall order for 30 minutes!

If we are going to accelerate the growth of all readers, there is slim likelihood of that happening when intervention is left to a few 30-minute periods. It also raises the question: What is happening during the other parts of the school day and school week? We may need to reexamine current models conceptualized within the response-to-intervention (RtI) frameworks that sometimes start with the assumption that Tier I instruction should reach about 80–85% of learners. This means that for one out of every five or six learners, the burden for acceleration is shifted to one part of the school day instead of placing the responsibility on all parts of the school day.

Classroom catalysts suggest that if instruction matters, then it matters throughout the day. But let's examine what happens when teachers follow typical practices in literacy frameworks. Many literacy frameworks begin with large-group shared reading experiences. The teacher usually selects an at-level text to share with the class. When that text is set aside, it is rarely accessible for readers in need because the text is too difficult for independent reading. During small-group guided reading, the student should experience a text that is at an appropriate level. Independent work away from the teacher should be appropriate if the teacher can meet the challenge of designing it in such a way that the student can continue to work with the material. Once the teacher moves back to a central text for content instruction, however, the selection often involves a text that will not be accessible for below-level readers. By the end of many days, the readers in need of the most practice actually receive the least. The amount drops even further if the teacher doesn't differentiate texts during small-group instruction and further yet if the teacher does not provide accessible texts during independent reading

If we are going to help all readers be successful, we need to focus on that goal throughout the school day, throughout the school week, and throughout the school year.

time. Accelerating the growth of all readers is not likely when those with the greatest needs often spend very little time with text they can read with ease.

If we are going to help all readers be successful, we need to focus on that goal throughout the school day, throughout the school week, and throughout the school year. When we use the term *classroom catalysts*, we are referring to any instructional techniques that when implemented effectively produce greater gains using the same amount of time than other techniques. Classroom catalysts are the adjustments teachers can make to tighten up, intensify, and achieve more with many commonly used instructional techniques (Bomer, 1998).

We begin by examining the universal instruction received by all learners. Whether that instruction is provided in whole groups, small groups, or individually, all current instructional formats and programs need to be tightened up. In the balance of this article, we examine three guidelines for using classroom catalysts to address acceleration in moving literacy instruction closer to reaching all students. Classroom catalysts lead to:

1. better engagement in effectively designed whole-group literacy lessons,
2. small-group literacy instruction that targets instructional needs effectively, and
3. individualized literacy approaches that target instructional needs effectively.

Although classroom catalysts focus on a concern with those students who need to have a steeper trajectory of growth during the academic year to close the gap between their performance and expected levels, the ideas we discuss maximize the overall use of classroom time with greater engagement levels and targeted instruction for everyone. All students need to make progress no matter

what their proficiency levels. Classroom catalysts can fuel acceleration for those with the greatest needs while helping others continue to grow as readers.

Guideline 1: Classroom catalysts lead to better engagement in effectively designed whole-group literacy lessons.

The first dimension that needs to be examined during whole-group lessons is the overall level of student engagement. Students still spend significant amounts of instructional time in large groups, and the only way these literacy lessons benefit readers is if they stay engaged during those lessons. When classroom catalysts intentionally address issues like engagement, teachers may actually reduce additional demands on differentiation within the classroom. Indeed, high levels of engagement were characteristic of high-impact exemplary teachers (Pressley, Allington, Wharton-McDonald, Collins Block, & Mandel Morrow, 2001). In literacy programs where teachers had a greater impact on outcomes, engagement levels were as high as 90% of the students engaged 90% of the time. In classrooms of exemplary teachers who had less impact on outcomes, engagement levels were around 60% engaged 60% of the time. One way to move closer to accelerating the growth of all readers is to focus on engagement levels. One step to take is the integration of the use of *total participation techniques* (Himmele & Himmele, 2011). Simple tools can be created and made available so that large-group interactions allow all students to think and respond.

One example of such a tool would be processing cards. Every student makes a processing card using a large blank index card. On one side of the card, the student writes "Still Thinking," and on the other side of the card they write "Ready to Share." During large-group discussions, the teacher can ask a higher-level question to start discussions. Students place their cards displaying the "Still Thinking" side and indicate when they are ready to contribute to the discussion by turning their card to the side that says "Ready to Share." This allows the teacher to monitor to the group for greater participation instead of immediately calling on a few quickly raised hands.

Another classroom catalyst is to use whole-group models that are more conducive to differentiation. These models will also foster greater student engagement. One such model we have discussed is Grouping Without Tracking (Opitz & Ford, 2008), a model teachers can use to

Supporting readers in more challenging texts actually accelerated progress, providing more bang for the buck.

work with different levels of readers when one text is being used with all readers. Using flexible grouping to vary levels of teacher support and a gradual release structure, students who can read and respond to the text on their own are guided indirectly while those students who need support to read and respond to the text are guided directly by the teacher. The model, which is based on the work of Paratore (1990), provides high expectations for all readers with the same meaning-based instruction but with variable levels of support. The model avoids dumbing down materials, instruction, or expectations for some readers, especially those who need our help the most. Tomlinson and Moon (2013) call it "teaching up." It creates respectful work for all learners. It also provides for scaffolded, supportive instruction for readers in need, with more challenging texts by designing the lessons with the use of a gradual release structure. The steps for implementing a Grouping Without Tracking lesson are given in Table 1.

We recognize that using challenging texts with all learners has been somewhat controversial and rightly so. Students are often placed in difficult texts with very little instructional support, spending most of their time in texts they can't read. This is far from what we are proposing. Instead, we are talking about supportive instruction. Stahl and Heubach (2005) discovered that when students were placed in more challenging text surrounded by teacher-scaffolded instruction, they made greater gains than those students that only spent time in at-level texts or in challenging texts without support. Supporting readers in more challenging texts actually accelerated progress, providing more bang for the buck.

Guideline 2: Classroom catalysts lead to small-group literacy instruction that targets instructional needs effectively.

Taylor, Pearson, Clark, and Walpole (1999) studied the differences in the frequency of literacy practices in most, moderately, and least effective schools. They found statistically different levels in the frequency of teachers coaching during reading. In the most effective schools, more than 50% of the teachers were frequently observed coaching during reading. Levels dropped off significantly for moderately and least effective schools. Taylor and colleagues remind us that certain instructional techniques during small-group reading instruction may have a greater impact on learners accelerating their growth and change.

Table 1: Grouping Without Tracking Steps

Preparation

1. Select a text that most students are able to read and respond to without direct support of the teacher, and that the remaining students are able to read and respond to with direct support from the teacher.

2. Plan prereading activities that will adequately frontload the lesson for all readers. Focus on standards-based skills and strategies needed by your students, as revealed in ongoing assessments.

3. Plan response activities that will indirectly support as many students as possible in working independently from the teacher. If possible, let these flow from the instruction done in the prereading phase of the lesson.

4. Be prepared to provide direct support and additional instruction to students who require extra teacher guidance.

5. Plan extension activities that bring the class together as a community of learners and enable all students to make an important contribution. If possible, let these build on the frontloading and engagement activities.

Frontloading (All Together)

1. Activate schema about the text. Get all students thinking about the topic or theme.

2. Develop background knowledge for the text.

3. Address any skills and strategies, including vocabulary, necessary for students to read the text successfully.

4. Generate interest about the text.

5. Read aloud a short selection from the beginning of the text. After you have read, use think-alouds to model the response activity. Have the students replicate your work as you model.

6. To provide guided practice, invite all students to read the next selection of the text with you using choral reading or an informal reader's theater. As the students read with you, prompt them to tell you how to add to the response activity. As appropriate, have students add to their work with you.

7. To provide independent practice, invite all students to read one more selection of the text on their own while in the large group. Focus their reading and follow up to see that the purpose for reading was accomplished. As they are reading on their own, monitor and probe to see that they can add to the response activity without you.

8. Set a clear purpose for reading and responding to the rest of the text.

9. Provide visible written directions for independent work. *(continued)*

With small groups, one classroom catalyst would be coaching during reading. That should be at the heart of guided reading instruction. What we've recently seen, however, is guided reading that is primarily focused on covering leveled texts and where teaching the text seems more important than teaching the readers. In a national survey of guided reading practices by primary teachers, more identified the purpose of guided reading as something other than scaffolded instruction during reading (Ford & Opitz, 2008).

Another classroom catalyst that can be used in tightening up small-group instruction is Connected Literature Circles (Opitz & Ford, 2008). Many teachers are familiar with some form of literature circles for small-group instruction. Typically it involves the use of different sets of texts matched to different groups of learners. Connected

Literature Circles tighten up the model by having the teacher select related texts that connect through instruction that transcends the texts and learners. These text connections guarantee that all learners will have access to similar meaning-based instruction. All learners can also share in powerful conversations across the texts related to the focus of instruction. The teacher can continue to vary levels of support for different groups, further accelerating the growth of more readers.

With focus, the teacher can drop in on conversations about texts in small groups with greater intentionality. Since the student talk reflects what they are thinking and because that thinking reflects the strategies they are using, capturing that conversation is critical. With a focus and a list of group members, the teacher can track the conversation using an easy coding system to record information

Table 1: Grouping Without Tracking Steps *(continued)*

Reading and Responding (Two Groups)

Indirect Support

1. Turn over the completion of the task modeled and practiced during the frontloading activity to those students who can read and respond to the text on their own.

   • Review the directions as needed.

   • Review any class rules about working independently as needed.

   • Clearly identify one or two activities that the students can do when they are done with their work, if you are still working with your small group.

   • Monitor the students as they start on the reading and response activity.

Direct Support

2. Once the students are engaged in their independent work, call those students in need of additional support together to work with you at the table or in an identified place.

   • Review any of the frontloading activities as needed.

   • Address any other critical skills more appropriate for this group.

   • Assist them in the reading of the text.

   • Depending on the length of the text and the ability of the students, you may choose to read the text aloud to them, read the text together, read with partners, paraphrase certain sections, or any combination of techniques.

   • Identify at least part of the text that students can read aloud or silently on their own.

   • Provide support in completing the response activity, including additional modeling and guided practice as needed.

   • Be intentional about identifying at least part of the response activity that the students would complete on their own.

   • Monitor students to assess understanding and work habits.

Extending (All Together to Start)

1. In developing postreading project work, use this opportunity to set up heterogeneous groups.

2. Review the work that students completed independently to assess the level of engagement and understanding. Adjust group membership in subsequent lessons based on information collected while reviewing this work and the work of students during small-group time.

3. Provide additional time for students in the support group to read texts independently at his or her instructional level.

4. Provide additional opportunities for students who worked independently to meet with you for interaction around additional texts they are reading.

to assess the level of thought and then know better how to prompt responses that encourage students to think more deeply or in new directions. For example, if a teacher has been focused on helping students make connections to self, other texts, and world events while they read and discuss, the teacher might track how many of each type of connection the students revealed in their discussions. If one type of connection seemed the dominant way of thinking (for example, text-to-self), then the teacher would adjust instruction to include more modeling and prompting of text-to-text and text-to-world connections.

Guideline 3: Classroom catalysts lead to individualized literacy approaches that target instructional needs effectively.

The final area that needs to be carefully reexamined if an overall literacy program is to lead to accelerated growth for learners with the greatest needs is the independent learning experiences within a classroom setting. We have previously voiced our concerns about using instruction that fails to seriously consider what the other students are doing when the teacher is meeting with a small group (Opitz & Ford, 2002). We cannot emphasize enough that the power of literacy experiences away from the teacher need to rival the power of literacy instruction with the teacher.

Independent work needs to be intentionally planned around meaningful reading and writing practice opportunities. Many teachers are discovering systems that help students grow in their urgency, stamina, and self-regulation to sustain productive practice independently (e.g., Boushey & Moser, 2014). Using individualized instructional models such as a Focused Readers Workshop (Opitz & Ford, 2008) is but one way to build this stamina and self-regulation. In this approach, the workshop is modified with an instructional focus that transcends learners and texts to provide all learners access to meaning-based instruction that can then be practiced within appropriate matched texts. A similar model is at the heart of a supportive workshop approach implemented in the School Enrichment Model–Reading (SEM-R) framework by Sally Reiss (2009) and her colleagues. Reiss' concerns grew out of an observed pattern of talented readers selecting relatively easy texts in independent reading programs. Unfortunately, that often meant these readers resisted or withdrew from more challenging texts. Reiss argued for a supportive workshop model in which choice was not wide open but supported by the teacher, leading to more appropriate texts in the hands of more readers. Conferring with readers becomes more intentional as

well to help readers work through instead of resist challenging problems within their texts. One interesting outcome in implementing the program even with its focus on talented readers was that the supportive model actually raised performances of learners across levels.

Conclusion

We believe schools need to discuss how to use classroom catalysts to target efforts to differentiate instruction to accelerate the growth of all readers, especially those who need our help the most. We suggest that those discussions start with these three recommendations.

- **Recommendation 1**: Look critically at issues with whole-group instruction in literacy programs. First, examine the amount of time spent in whole-group lessons. Knowing that targeting instruction is more effectively done in small groups or individually, look at whether the time devoted to large-group instruction is appropriate. Second, when these lessons are used, assess and improve levels of student engagement. Third, consider using models that provide a way to structure more direct support during whole groups like Grouping Without Tracking.
- **Recommendation 2**: With small groups, shift a current focus on teaching texts to teaching readers. Strengthen the teachers' ability to coach readers as they work on texts in small groups. Tighten up existing small-group models so that all readers have access to the same meaning-based instruction and can share in high-level postreading discussions. Explore the use of text sets that allow readers to move through levels of texts more quickly with improved comprehension.
- **Recommendation 3**: In individualized approaches, make sure the work that students engage in away from the teacher is powerful work. Tighten up existing individualized approaches so that all readers are supported in their choice of appropriate materials, and focus on high-quality, mediated, meaning-based instruction before, during, and after the independent reading.

We fully recognize that the guidelines and recommendations we propose herein suggest rethinking assumptions behind some critical institutionalized ideas. We need to move forward in our thinking about whole-group instruction, small-group reading, and independent reading programs. There may be other institutionalized ideas that

need to be examined critically as well. Nothing should be sacred or off the table if we are to serve students rather than orthodoxies in our effort to move closer to accelerating the growth of all students.

Michael P. Ford *is a professor in and chair of the Department of Literacy and Language at the University of Wisconsin Oshkosh. Michael has been working with preservice and inservice teachers for the past 28 years. He is a former Title I Reading and First Grade teacher. He is the co-author, with Colorado's own Michael Opitz, of six books, including five published by Heinemann:* Classroom Catalysts, Accessible Assessment, Do-able Differentiation, Reaching Readers, *and* Books and Beyond.

Michael F. Opitz, *a former elementary school teacher and reading specialist, is a professor emeritus of reading education at the University of Northern Colorado where he taught undergraduate and graduate courses and supervised doctoral dissertations. Michael is now a literacy consultant and well known to individual teachers, instructional leaders, and researchers as the author of numerous professional and curricular resources and through his extensive work in schools nationwide.*

References

Bomer, R. (1998). Transactional heat and light: More explicit literacy learning. *Language Arts,* 11–18.

Boushey, G., & Moser, J. (2014). *The daily five: Fostering literacy independence in the elementary grades* (2nd ed.). Portsmouth, ME: Stenhouse.

Ford, M., & Opitz, M. (2008). A national survey of guided reading practices: What we can learn from primary teachers. *Literacy Research and Instruction, 47*, 1–23.

Himmele, P., & Himmele, W. (2011). *Total participation techniques: Making every student an active learner*. Alexandria, VA: ASCD.

Opitz, M., & Ford, M. (2002). *Reaching readers: Flexible and innovative strategies for guided reading*. Portsmouth, NH: Heinemann.

Opitz, M., & Ford, M. (2008). *Do-able differentiation: Varying groups, texts and support to reach readers*. Portsmouth, NH: Heinemann.

Opitz, M., & Ford, M. (2014). Classroom catalysts: 15 efficient practices that accelerate readers' learning. Portsmouth, NH: Heinemann.

Paratore, J. (1990, October). *Classroom contexts for literacy training: Flexible grouping*. Paper presented at the Wisconsin State Reading Association, Eau Claire, WI.

Pressley, M., Allington, R., Wharton-McDonald, R., Collins Block, C., & Mandel Morrow, L. (2001). *Learning to read: Lessons from exemplary first-grade classrooms*. New York: Guilford.

Reiss, S.M. (2009). *Joyful reading: Differentiation and enrichment for successful literacy learning*. Thousand Oaks, CA: Corwin.

Roe, M., & Egbert, J. (2011). Four faces of differentiation: Their attributes and potential. *Childhood Education, 87*, 94–97.

Schmoker. M. (2010, September 29). When pedagogic fads trump priorities. *Education Week, 30*(5), 22–23.

Stahl, S.A., & Heubach, K.M. (2005). Fluency-oriented reading instruction. *Journal of Literacy Research, 37*, 25–60.

Taylor, B., Pearson, P.D., Clark, K., & Walpole, S. (1999). Effective schools/accomplished teachers. *The Reading Teacher, 53*, 156–159.

Tomlinson, C.A., & Moon, T.R. (2013). *Assessment and student success in a differentiated classroom*. Alexandria, VA: ASCD.

Valuing the Visual:
Tips for Teaching Graphic Novels and Comic Books

Dani Kachorsky

This article provides multiple rich sources of materials for teachers to use in the classroom—a tool kit of sorts to delve into graphica with your students.

Comic books and graphic novels are two forms of sequential narrative art that are front and center in the lives of today's readers. Sometimes referred to as *graphica* (Thompson, 2008), both comic books (episodic narratives) and graphic novels (complete narratives) are rich texts that rely on a variety of modes such as text and image to convey meaning. As such, they need to be taught in a way that embraces their multimodal nature and complexity.

Unfortunately, the majority of the literature on teaching graphica focuses on its uses in supporting other literacy goals: engaging reluctant readers (Gavigan, 2011; McTaggart, 2008; Baird & Jackson, 2007), supporting English-Language Learners (Cary, 2004; Monnin, 2010; Hecke, 2011), or acting as a source for content (Alexio & Norris, 2013; Dallacqua, 2012; Boerman-Cornell, 2013). While such uses are worthwhile, they fail to recognize graphica as texts worth teaching in their own right. Within this article, I seek to provide a few activities and resources that can be used to teach graphica as texts worthy of instructional attention.

The Features of Graphica

In traditional literature, readers engage the mode of written text. In graphica, readers contend with a plethora of other features—gutters, panels, images, colors, vectors, gazes, expressions, movements, and so on. Although it is unlikely that average consumers will know these terms, readers of graphica do know how to navigate these features when they read (Monnin, 2010). To become critical readers of graphica, students need to know what these features are and how they function to make meaning (Pantaleo,

2011). Nevertheless, how readers use the features to make meaning can vary extensively based on context, so the resources provided here should not be considered an exhaustive list of these features and their uses. Instead, these lists can best be regarded as a jumping-off point.

Understanding Comics *by Scott McCloud*

Originally published in 1993, *Understanding Comics: The Invisible Art* remains one of the best resources for understanding how and why graphica is constructed the way it is. The author/illustrator, Scott McCloud, literally illustrates the concepts and terminology that build graphica in a straightforward and humorous manner. This book is great for teachers and students.

Scott McCloud TED Talk

In "The Visual Magic of Comics," McCloud walks viewers through a brief history of comic books and discusses the different features author/illustrators use in their storytelling (McCloud 2005). This TED talk also touches on McCloud's personal experience as a comic book creator.

An Introduction to the Grammar of Visual Design

While Kress and van Leeuwen's (1996) *Reading Images: The Grammar of Visual Design* is a wonderful resource for understanding the nature of visuals, it is also complex and expensive. However, the New South Wales curriculum support page features a more manageable version designed for teacher professional development (Quality Teacher Program, 2002). The link is a bit cumbersome, but it is well worth it (www.curriculumsupport.education.nsw.gov.au/secondary/english/assets/pdf/grammar.pdf).

Multimodality Glossary

This Glossary of Multimodal Terms defines every imaginable mode of communication in a clear and concise way (MODE, 2012). The reference material is well documented and high quality, coming from peer-reviewed journals and notable scholars in the field (http://multimodalityglossary.wordpress.com/).

Vanseo Design Blog

Although this blog is not intended as a graphica resource, it is dedicated to principles of design that are consistent across most visual media (Bradley, 2014). Since it is a blog, finding what you are looking for can be slightly difficult because so much is archived. However, searching visual grammar or design basics yields fruitful results. Also, since the blogger is a professional designer, this resource has the added benefit of demonstrating to students how the classroom connects to the world at large (www.vanseodesign.com/blog/).

What Do You Notice?

Alternatively, students can come to graphica terminology on their own. You can provide students with a massive selection of graphica and ask them to generate lists of the features they notice. Typically, students do not identify those characteristics that are more fully embedded in the text, such as facial expressions and vectors. However, they frequently notice major features like panel, gutter, speech bubble, and color. Use student *noticings* to create a comprehensive list that can be utilized as a reference point while they work with graphica. Features can be added to the list periodically. This strategy can be especially helpful in primary grades since the resources discussed previously feature vocabulary too complex for younger readers.

Making Meaning in Graphica

While vocabulary is important to understanding graphica, knowing what features are present and what they are called merely gives students the tools, or *metalanguage*, needed to discuss graphica. To analyze these texts, students need to recognize the ways in which author/illustrators use features and the ways they, as readers, make meaning from them.

Wordless Picturebook Summaries

Graphica is not unique in its nature as narrative sequential art. Like graphica, wordless picturebooks rely on the sequencing of images to carry narrative and mean-

Reading wordless picturebooks offers students an opportunity to develop literacy skills.

ing (Arizpe, 2013). Wordless picturebooks make different demands of readers than traditional printed text, and they require a different degree of engagement during the reading process as readers co-construct the narrative with the author/illustrator (Arizpe, 2013). As such, reading wordless picturebooks offers students an opportunity to develop literacy skills around texts that are both similar and in some ways more sophisticated than graphica.

Furthermore, reading wordless picturebooks forces students to attend to the images. When I first started using graphica, many of my high school students would read what text was present on the page, giving the images only a cursory glance. To draw conclusions about a text, they needed to examine the images closely, make inferences about content, and justify their conclusions. To start this process, I had students read and summarize wordless picturebooks and then compare summaries.

Although the basic plotlines of students' summaries are often similar, the details are frequently very different. For instance, while reading *A Ball for Daisy,* a fairly straightforward wordless picturebook about a dog, Daisy, who loves her ball, my students engaged in a surprisingly heated argument about how Daisy's ball ends up on the opposite side of a fence when she is playing with it (Raschka, 2011). Some students believed Daisy's owner kicked it over, while others believed that the ball simply bounced over.

When asked to justify their positions, students became increasingly frustrated as they pointed to the images on the page and claimed that what they were describing was happening on the page. In reality, the images on the page could represent either interpretation. The ball is indeed positioned near a foot, though the actual moment of contact is not represented, and the ball does appear to bounce as it is shown in the air in one panel, near the ground in another panel, and once again in the air in a third. However, readers never actually see the ball pass over the fence.

Eventually, students explained that they were adding information in the gutters—the white space between the panels. They were combining the information in the panels with their own experiences and logic to complete the visual sequences. Because these inferential constructions relied on personal experiences, student interpretations varied, but all made perfect sense. This activity not only forced students to recognize that the panels were providing information, but also led students to an understanding of how gutters functioned in wordless pictures books and,

subsequently, graphica. Other excellent wordless picture-books for this activity include *Sector 7, Flotsam,* and *Tuesday* by David Wiesner (2006, 1999, 1991), and *The Snowman* by Raymond Briggs (1978). Although these texts might seem more appropriate for primary grades, they work just as well at the secondary level. Additionally, *The Arrival* by Shaun Tan (2006), a wordless graphic novel, could be read for the same purpose.

Comic Reconstruction

Students can use a cut-up comic strip that can be reconstructed to form a coherent storyline. To do this, students need to closely examine the images, consider potential narrative moves that can be inferred across many images, and determine what inferential leaps are too great for a reader to make. Furthermore, in selecting how to begin and end their reconstructions, students demonstrate knowledge of narrative structures. Using a comic strip that does not contain text is best because when paired with the images in the panels, the clues in syntax and sentence structure make it easy for students to reconstruct the original storyline.

Low (2012) recommends using the classic Spy *vs. Spy* comic strips, which have very few text features, though primary teachers might find *Garfield* or *Peanuts* more appropriate for their students. These comic strips are excellent for showing students how graphica can be drawn and arranged so that the narrative structure becomes obvious. For example, many of the *Spy vs. Spy* comic strips feature a sequence of panels where one spy prepares a trick to play on the other spy. My students quickly picked up on the processes shown in the images and readily sequenced those panels. Also, *Spy vs. Spy* comics typically feature an explosion that students accurately placed at the end of their reconstructions, reasoning that the spies could not build bombs that had already exploded.

Not all graphica is as clearly sequenced as the *Spy vs. Spy* comics. In particular, *The Arrival,* a wordless graphic novel, conveys a narrative of a man immigrating to a foreign country. However, the fancifulness of the images allows for multiple interpretations by readers. For example, in reconstructing pages 24–27 of chapter two in *The Arrival,* students developed their own original narratives by sequencing the images in different ways. While some students still showed the protagonist wandering around a new city in confusion, others told a story of a

Comic strips are excellent for showing students how graphica can be drawn and arranged so that the narrative structure becomes obvious.

man caught in a *light storm,* a man following a tour guide, and a man trapped in a *Twilight Zone*–esque nightmare. In addition to being fun, using a less structured narrative sequence can help demonstrate to students how much work the gutters do for the story. Fanciful images are also featured in Wiesner's wordless picturebooks, making them excellent alternatives.

What I Meant to Say

To extend the comic reconstruction activity, ask students to write out text-only versions of their stories. These written versions can then be compared to readings done by other students to see if the storylines represent what the student-author intended. Often, what their peers read differs from what the student-author was trying to convey. In most cases, this incongruity occurs because the student-author was making too big of a leap in the gutter. In other words, there were not enough clues in the panels for the reader to make the appropriate inferences in the gutter to construct the intended story. This awareness assists students in understanding how different features converge in graphica to convey meaning. Furthermore, students can begin discussing what they would need to do to make the sequence coherent enough to convey the story they were attempting to tell.

Bitstrips

While originally a social networking application, available for Android and Apple, Bitstrips can be easily adapted for classroom use. (Most apps mentioned in this article are available online through Google Play [https://play.google.com/store] or Apple iTunes [www.apple.com/itunes/]). Essentially, Bitstrips allow students to create an avatar that can then be placed into pre-existing single-comic panels that are updated frequently. Also, if students are Facebook friends, they can incorporate each other's avatars into certain panels. Many panels do include a single textbox that explains the situation occurring in the image. However, these are editable, so Bitstrips becomes a great platform for teaching students that less is more when it comes to text in comics. Students can write their own text to make the preexisting scenarios take on different meanings, and students can be challenged to infer what events came before the existing panel. As with many of the activities already discussed, this helps prevent students from relying too heavily on text in graphica.
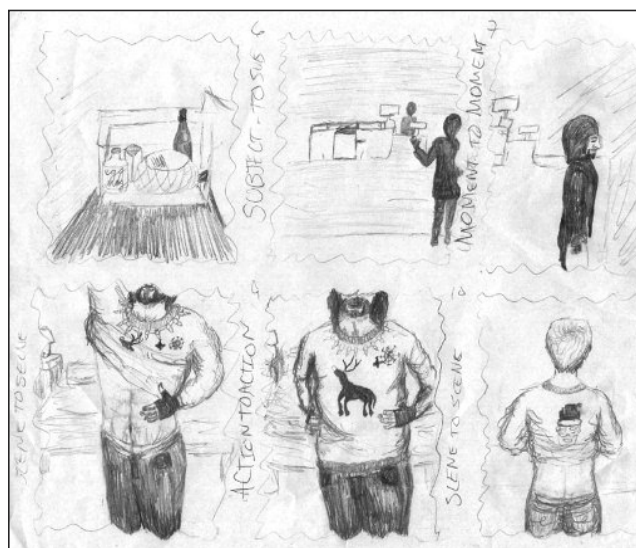
Bitstrip Example

Prove It!

In addition to gutters and panels, graphica utilizes a plethora of other features students can use to construct meaning. A color scheme can indicate time of day or the mood of a story. Character facial expressions and gestures can provide clues to characters' feelings and personality traits. Wavy lines can suggest movement or scent.

I have found that the best way to direct students' attention to these features is by asking them to prove conclusions they draw about the text. For example, while reading the manga version of *Macbeth*, several students decided that Macbeth was going insane (Sexton, Grandt, & Chow, 2008). As evidence to support their conclusion, students cited aspects of image and text: (1) the dagger Macbeth followed down the hallway glowed in the dark like a ghost, so he was seeing things; (2) Macbeth had a speech bubble, so he was talking out loud to himself; and (3) the illustrators drew Macbeth with *crazy eyes*.

Typically, I wait for these moments to occur naturally during instruction, but for those who would rather have a more structured lesson, students can be presented with a series of questions asking them about the story's mood, characters' personalities/behaviors, and ambiguous sequences. Then students can be asked to justify their responses with visual and textual evidence. Highlighter tape and sticky notes can be used by students to indicate the exact features that led them to draw their conclusions. Often, students are not aware of what features led them to the conclusions they drew, so asking them to pinpoint these can help them become more aware of the aspects of graphica while they read.

Creating Graphica

Sometimes the best way to learn something is by doing. As such, having students create their own graphica can be incredibly useful in making students more aware of how the features in these texts interact (Pantaleo, 2011). As with the What I Meant to Say activity, authoring graphica requires students to be aware of how and why features are used, and requires them to use such features effectively.

Drawing Words and Writing Pictures

The Drawing Words & Writing Pictures website (dw-wp.com) was created by two cartoonists, Jessica Abel and Matt Madden (2014), who are also educators. Although there are resources on this site for teaching graphica, they also offer an extensive set of materials to aid in comic creation, including video tutorials.

Wally Wood's 22 Panels That Always Work

For students who are having difficulty figuring out what to draw next, this is the perfect resource. Wood offers

up 22 panel ideas that never fail to move a story forward and includes brief descriptions of when to use each panel. An Internet image search for "Wally Wood 22 Panels" will provide access to this resource.

Comic-Creating Websites

For students who are not comfortable drawing, several websites provide predetermined characters and backgrounds that students can insert into panel templates to tell original stories. For younger children, MakeBeliefs Comix.com and ReadWriteThink.org's Comic Creator tool are simple to use and navigate. For older students, Toondoo.com and Stripgenerator.com are free and fairly easy to use, though they have a limited number of characters and backgrounds are often limited to color choice. Pixton.com is a more flexible platform for designing graphica. Characters can be customized, and backgrounds act more as drop-in sets. This website offers free accounts, as well as paid educator accounts. The upside of the educator account is the ability to share creations among classmates, as well as access to a larger number of panel templates.

Comic Strip Applications

Several apps (applications) are now available for cellular phones and tablets that enable individuals to create graphica without drawing. Although these apps tend to be more complicated than the available website software, most are free and can usually utilize photo images instead of, or in addition to, preexisting backgrounds and characters. Comic Strip It!, Comic Creator, and Comic & Meme Creator are three such applications. Keep in mind that apps tend to come and go quickly, so by the time you read this article, the apps discussed here may no longer exist. However, something similar will be available.

Comic Filters

For students wishing to use photos instead of drawing to create graphica, apps are available that can filter photos to make them look like traditional comic book sketch art. This way, students can still maintain the look of graphica without the drawing skill. Two quality apps currently available are Sketch Guru and Photo Sketch.

Speech Bubble Apps

Photo Talks and PicSay are apps that allow speech bubbles to be added to photographs, which can help in graphica creation. However, these apps allow only one image to be altered at a time, unlike the comic strip apps that typically allow an author/illustrator to create a complete sequence.

Reading Graphica

As a relatively new medium, there is not a standard canon when it comes to comics. This is not necessarily bad, but it certainly makes it difficult for teachers looking to select high-quality literature for their classrooms. Listed next are a few resources for selecting such literature.

American Library Association

Every year, the Young Adult Library Services Association, a branch of the ALA, puts together a list of graphic novels that they consider to be of particularly high quality (American Library Association, 2014). This list features a variety of genres, grade levels, and lengths, including single-title graphic novels and serial compilations. Furthermore, the Association for Library Service to Children, also a branch of the ALA, has complied graphic novel reading lists for grades K–8.

Forbidden Planet's 50 Best of the Best Graphic Novels

Forbidden Planet (2014) is quite possibly the most famous comic book store in the United States, and the people who work there are some of the most knowledgeable in the business. Their list of the 50 best graphic novels includes many classics and a few less familiar titles. However, all are incredibly high-quality texts revered by readers and creators alike.

Wikipedia's List of Award-Winning Graphic Novels

Some graphic novels and comic books have earned spectacular awards, including the Hugo Award and the Pulitzer Prize (Wikimedia Foundation, 2014). Also included on this Wikipedia list are Eisner and Harvey award winners, which are awarded to graphica by field experts.

Breathtaking Adaptations: 13 Classic Books Transformed into Graphic Novels

This photographic list created by The Huffington Post serves as a nice jumping-off point for discovering novel-to-comics adaptations (TheHuffingtonPost.com, 2014). Although not an extensive list by any means, it does feature some of the more visually interesting adaptations available.

Index to Political and Social Commentary in Comic Books

Mike Grost (2014), a comic book enthusiast, catalogued the graphica collection in the Michigan State University Library Comic Art Collection according to the political and social issues featured in each title. This index can be incredibly useful when acknowledging that comics, like other literary texts, are products of their time periods.

This resource can help build content-based units around graphica, especially in regard to propaganda comics and women's rights.

Final Thoughts

Graphica is a rich, robust medium—texts comprised of a variety of features from which students can make meaning. They are carefully constructed, requiring readers to make high-level inferences and creators to be hyper-aware of design choices. This makes these texts worth examining in the classroom as more than a means for accomplishing other literacy ends. In our increasingly multimodal world, graphica needs to be embraced by teachers in ways that allow students to read such texts expertly. Of course, what is provided in this article is just the tip of the proverbial iceberg, a tool for surviving in the trenches. Or, as in the case of graphica, a tool for surviving in the gutters.

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References

Abel, J., & Madden, M. (2014). Drawing words and writing pictures [Website]. Retrieved from http://dw-wp.com/

Alexio, P.A., & Norris, C.E. (2013). Planarian worms, shock generators and apathetic witnesses: Teaching psychology and graphic novels. *Psychology Teaching Review, 19*(1), 36–43.

American Library Association (2014). Young Adult Library Services Association [Website]. Retrieved from http://www.ala.org/yalsa/

Arizpe, E. (2013). Meaning-making from wordless (or nearly wordless) picturebooks: What educational research expects and what readers have to say. *Cambridge Journal of Education, 43*(2), 163–176. doi:10.1080/0305764X.2013.767879

Baird, Z.M., & Jackson, T. (2007). Got graphic novels? More than just superheroes in tights: Children and Libraries. *The Journal of the Association for Library Service to Children, 5*(1), 4–7.

Boerman-Cornell, W. (2013). Exploring the text/image wilderness: Ironic visual perspective and critical thinking in George O'Connor's graphic novel journey into Mohawk country. *Bookbird: A Journal of International Children's Literature, 51*(4), 29–34.

Bradley, S. (2014). Vanseo Design [Website and blog]. Retrieved from www.vanseodesign.com/blog/

Briggs, R. (1978). *The snowman.* New York: Random House.

Cary, S. (2004). *Going graphic: Comics at work in the multilingual classroom.* Portsmouth, NH: Heinemann.

Dallacqua, A.K. (2012). Exploring literary devices in graphic novels. *Language Arts, 89*(6), 365–378.

Forbidden Planet (2014). 50 Best of the best graphic novels. [Website] Retrieved from https://forbiddenplanet.com/log/recommendations/50-best-best-graphic-novels/

Gavigan, K. (2011). More powerful than a locomotive: Using graphic novels to motivate struggling male adolescent readers. *The Journal of Research on Libraries and Young Adults, 1*(3). Retrieved from http://www.yalsa.ala.org/jrlya/

Grost, M.E. (2014). Index to political and social commentary in comic books [Website]. Retrieved from http://mikegrost.com/polit.htm

Hecke, C. (2011). Graphic novels as a teaching tool in high school and university English as a foreign language (EFL) classrooms. *Amerikastudien, 56*(4), 653–668.

Kress, G., & van Leeuwen, T. (1996). *Reading images: The grammar of visual design.* New York: Routledge.

Low, D.E. (2012). "Spaces invested with content": Crossing the "gaps" in comics with readers in schools. *Children's Literature in Education, 43,* 368–365.

McCloud, S. (1993). *Understanding comics: The invisible art.* New York: HarperCollins.

McCloud, S. (2005, February). Scott McCloud: The visual magic of comics [Video file]. Retrieved from http://www.ted.com/talks/scott_mccloud_on_comics?language=en

McTaggart, J. (2008). Graphic novels: The good, the bad, and the ugly. In *Teaching visual literacy: Using comic books, graphic novels, anime, cartoons, and more to develop comprehension and thinking skills.* Thousand Oaks, CA: Corwin Press.

MODE (2012). Glossary of multimodal terms [Website]. Retrieved from http://multimodalityglossary.wordpress.com/

Monnin, K. (2010). *Teaching graphic novels: Practical strategies for the secondary ELA classroom.* Gainesville, FL: Maupin House Publishing.

Pantaleo, S. (2011). Grade 7 students reading graphic novels: "You need to do a lot of thinking." *English in Education, 45*(2), 113–131.

Quality Teacher Program. (2002). An introduction to the grammar of visual design. *Secondary English LIG.* Retrieved from www.curriculumsupport.education.nsw.gov.au/secondary/english/assets/pdf/grammar.pdf

Raschka, C. (2011). *A ball for Daisy.* New York: Random House.

Sexton, A., Grandt, E., and Chow, C. (2008). *Shakespeare's Macbeth: The manga edition.* Hoboken, NJ: Wiley Publishing.

Tan, S. (2006). *The Arrival.* New York: Scholastic.

TheHuffingtonPost.com. (2014). Breathtaking adaptations: 13 classic books transformed into graphic novels (photos) [Website]. Retrieved from www.huffingtonpost.com/2010/08/20/classic-book-to-graphic-novel_n_688270.html

Thompson, T. (2008). *Adventures in graphica: Using comics and graphic novels to teach comprehension, 2–6.* Portland, ME: Stenhouse.

Wiesner, D. (1991). *Tuesday.* New York: Clarion Books.

Wiesner, D. (1999). *Flotsam.* New York: Clarion Books.

Wiesner, D. (2006). *Sector 7.* New York: Clarion Books.

Wikimedia Foundation (2014). List of award-winning graphic novels [Website]. Retrieved from http://en.wikipedia.org/wiki/List_of_award-winning_graphic_novels

Mobilize!

LINDSEY J. SCHULZ

Lindsey shares how she integrated mobile apps into a learning experience for her students during a trip to Germany. Then she further incorporated the apps in the classroom environment during the school year to improve students' technology proficiencies and increase written communication skills.

The journey of five thousand miles begins with a single app, as does a 185-day school year. Last summer, I chaperoned students on a German American exchange program excursion. As the German teacher leading the trip, I realized that I could impact even more students throughout the school year by applying the same mobile learning methods used for a successful exchange experience within my classroom.

What Is Mobile Learning?

Mobile learning is not just about which device you choose, but how you engage students in learning. Vavoula and Karagiannidis (2005) summarized *mobile learning* definitions as learning that can occur anywhere with wireless devices such as iPhones, tablets, or laptops. Sharples, Taylor, and Vavoula (2005) reflected that traditional mobile learning emphasized the technology tools used when, in reality, mobile learning tools could be anything that allows the learner to be mobile, such as printed books or notepads. However, alternate definitions of *mobile learning* emphasized that the technology tools used are of equal importance to how mobile the learner is. For example, Vavoula and Karagiannidis (2005) stated that *mobile learning* should be defined as any learning not in a set location and which benefits from use of mobile technologies. Considering the assortment of devices available and the need to encourage bring-your-own-device policies,

> *Mobile learning is not just about which device you choose, but how you engage students in learning.*

the type of technology does not matter for mobilizing your classroom. In my classroom, we have access to Apple iPhones, iPads, and iPods; Android phones and tablets; Canon digital cameras; all types of laptops; Google Chromebooks; and more. Structuring learning around a particular device will only limit what we are able to do. It works much better to create an innovative lesson that can use a wide variety of technologies.

Lessons From Germany

Summer exchange trips can be a life-altering event for students. Not only do they tour some of the most famous historical sites and popular castles, experience day-to-day life, and make new friends, but students also encounter new situations in which they are not familiar—customs, the language, or even how to pay to use a public toilet. Prior to the trip, my goal was to prepare students as much as possible for these encounters. I held weekly meetings at which we discussed German customs and made plans for acclimating to the new environment. I provided a list of recommended mobile applications (apps) to download for use while traveling (most apps mentioned in this article are available online through Google Play [https://play.google.com/store] or Apple iTunes [www.apple.com/itunes/]). We made decisions about which apps we would use to communicate with our German exchange partners and to be in touch with families back home.

WhatsApp

Many German students were already communicating with my students via Whats App, a mobile messaging app. WhatsApp is available on many devices and is used to send text messages without having to pay per message, as would be the case while traveling abroad. Using this app, I was able to set up a group that allowed us to message all parents and participants at the same time. This allowed for quicker communication of weekly updates, changes in plans, and arrivals at new locations (e.g., landing in Germany). At the time, it was a little more difficult to share videos and still images with this app, which is why we decided to use Facebook to share experiences.

Figure 1. Translation of a plaque

Facebook

To ease communications and streamline the sharing of experiences while traveling through Germany, I set up a Facebook group. Within Facebook, users can create private groups to which one must be invited. This helps to protect students' privacy and allows the creator to determine who is allowed access. Not only did this serve to increase communication with those at home and to provide parents with daily updates on the status of their children, but it also enabled students to partake in comprehensive journaling that could then be used to remember and recall the experiences upon returning home. This process received many positive comments from students and parents, provided a record of events on which one could later reflect, and motivated students to record more daily information for posting.

Miscellaneous Apps

All students had access to WhatsApp and Facebook on their personal devices. In addition to these apps, I recommended that students download LEO (a German–English dictionary), Word Lens (a translation app), public transportation apps for Berlin and Munich, and a few other tourist-type apps. Word Lens was by far the most entertaining and popular app used on the trip. This app utilizes a mobile device's camera. The user opens the app, selects from which language to translate, aims the camera at text, and the app will translate that text. It is almost

Students had to use their mobile devices to record the tasks, such as interviewing a native Berliner or learning to sing a new song in German, as proof of their accomplishments.

addicting to walk around using this app by pointing your smartphone at street signs, billboards, menus, and so on to see what they mean. Word Lens was recently integrated into the Google Translate app and is no longer available as a stand-alone app. Here is a quick video showing how Word Lens works: http://goo.gl/bHCF1A.

Standard Device Apps

Most mobile devices come with a standard camera (still and video) and an audio recorder. In Germany, students completed a scavenger hunt for which they had to conduct interviews with native Germans. This was an amazing experience. After a week in Berlin, the capital, I distributed a list of tasks for the students to complete. They were armed with their individual mobile devices and city maps. Students had to use their mobile devices to record the tasks, such as interviewing a native Berliner or learning to sing a new song in German, as proof of their accomplishments. Students used apps to translate informative plaques (Figure 1). They also had to create crayon rubbings of the unique manhole covers in Berlin that feature famous landmarks (Figure 2). They then had to locate the original landmarks and take pictures to compare to the crayon rubbings (Figure 3).

At a later time, the student travelers also interviewed, and were interviewed by, German students from our partner school. All students recorded these interviews
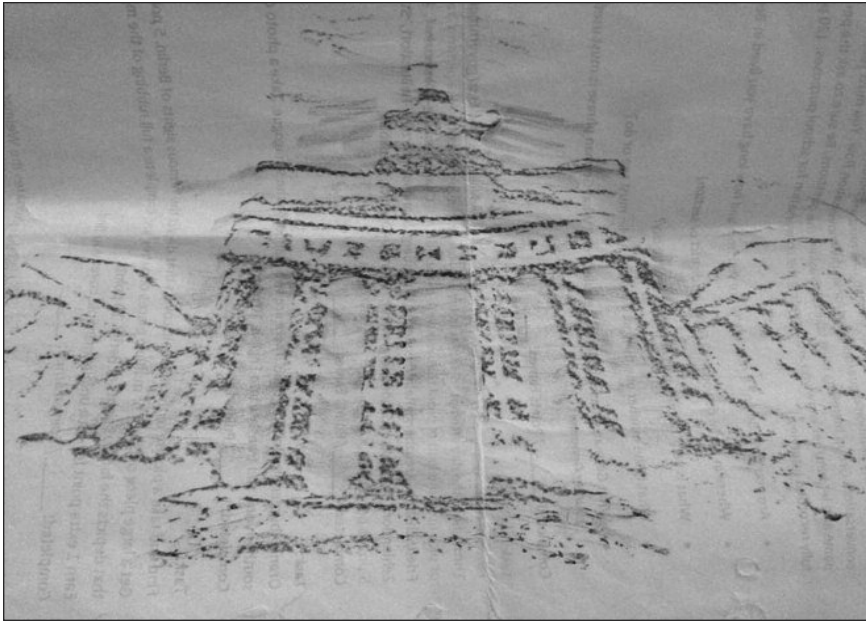
Figure 2. Crayon rubbing of famous Berlin landmark

Figure 3. Berlin landmark

for later processing and use in writing narratives. These were then shared among the students to create a cultural comparison. This experience was valuable in creating a collaborative environment, improving technology proficiencies, and increasing written communication skills.

The success of using mobile devices to enhance the overall travel experience got me thinking about how the lessons learned in Germany could be applied to my classroom at home. While some apps might not be as applicable in the classroom, many are, and they could serve to increase student motivation and success.

Classroom Application

To plan for a leap into mobile learning this school year, I established which apps should be considered standard and could be used with any device. Just as I had students download apps in preparation for traveling abroad, a list of apps was provided in August for students to download and use in class throughout the year. These included Google Drive, LEO (the German–English dictionary), Merriam-Webster (English dictionary), Quizlet, and Remind (see Table 1). As well as integrating some standard apps, I sought out ways to incorporate and build on some of the activities from the student exchange trip by using Facebook as well as audio and video activities.

Google Drive

My school uses Google for student and teacher e-mail, online production, and online storage. Since all students already have accounts, this was a logical app to integrate. Google Drive allows students to create documents, presentations, spreadsheets, and more. Students are then able to share these files with other classmates and the teacher. This makes it incredibly easy to peer edit, grade files, and provide feedback. Because all files are stored online and automatically saved, students always have access to their work.

Quizlet

Quizlet allows users to make accounts, but an account is not necessary to access content. Quizlet is, essentially, an interactive flash-card app. Users can search for content (e.g., German food vocabulary) and study with digital flash cards, play games, and take a quiz or test. If users do have accounts, they can save flash-card sets to their profiles and create their own sets. Users can also create classes and invite students. Quizlet is free to users; however, you can purchase upgraded accounts. There is a teacher account available in which you can keep student records, add your own images and audio files, and have ads removed.

Table 1. Free Apps Available Online			
App	Purpose	Apple iTunes	Google Play
Google Drive	Access and edit your Google files	http://goo.gl/lrixww	http://goo.gl/h0zU7G
LEO	Online German dictionary	http://goo.gl/7B5zmt	http://goo.gl/dgfDGP
Merriam-Webster	English dictionary	http://goo.gl/h4K7Fa	http://goo.gl/dRAJHJ
Remind (formerly Remind101)	Safely communicate with parents and students (text reminders, chat for homework help)	http://goo.gl/Jn05Fv	http://goo.gl/V63nqe
Quizlet	Flash-card app that creates games and quizzes with material you upload or create	http://goo.gl/gWMkxo	http://goo.gl/kztVNb

Remind

Remind was formerly called Remind101. This app allows teachers to create classes to which they can invite student and parents. Remind allows users to send text messages and e-mails for communicating information about classes without having to share personal phone numbers or other private information. From this app, you can send a text message reminding students to study for an upcoming test or inform parents about meetings or events. Remind provides a way to avoid unopened e-mails and communicate efficiently.

Facebook

As our Facebook group was quite successful, it seemed like the perfect tool to use in the classroom to record daily happenings, share with parents, provide students with a safe place to ask questions about class, and have a record of our year. I set up another Facebook group for students and parents. Students quickly became the journalists of the classroom. To share what happens in a day, students were selected to put together short video or audio clips to share with parents, use as a reminder of that day's work, and inform absent students about what they missed. To make these videos, students recorded with their mobile devices and compiled the recordings in apps such as Vine or iMovie.

As the year progressed, the students developed a trivia activity on Facebook. Students would post current events, history, fun facts, and more on our Facebook group. Students who posted the information received extra credit in class. Students would post something of interest (e.g., this day in history, famous German band, memes of fun German words), then come to class and quiz the other students on what was posted. Students who knew the answers received bonus points or other little rewards. This extended-learning activity benefited all because students were highly motivated to use their own time to search for facts about the German culture or language, and sharing this information during class time allowed all students to gain the knowledge.

Although teachers use a variety of social networking tools, I chose Facebook because the majority of my students and their parents already access it on a daily basis. Thus, the addition of this group was easy.

Here is a short video showing how to create a Facebook group: http://goo.gl/f1W27l. If you are an educator of younger students, there are other possibilities for sharing such as Edmodo.com. Edmodo is a comprehensive social networking site where teachers can safely build communities for all ages. Edmodo also allows users to post assignments, create collaborative groups, assess students, and more.

Audio and Video

In addition to using videos to share on Facebook, I integrated audio and video for performance assessments, for students to explain concepts in their own voices, and to breach the boundaries of the classroom walls. Educators are always searching for ways to extend classroom learning, and integrating audio and video can do just that. One example from this year is that students in my class were required to interview classmates, teachers, coaches, and adults outside of school. Students recorded these interviews (audio and/or video) to then use in creating products such as podcasts, digital stories, or animations about what they learned. A second example was implementation

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Table 2. Other Apps Worth Integrating Into Your Classroom Activities

Animoto Video Maker
- https://play.google.com/store/apps/details?id=com.animoto.android.videoslideshow&hl=en
- https://itunes.apple.com/us/app/animoto-video-maker/id459248037?mt=8
- https://animoto.com/

audioBoom
- https://play.google.com/store/apps/details?id=com.audioboom
- https://itunes.apple.com/app/audioboo/id305204540&mt=8
- https://audioboom.com/about/education

GarageBand
- https://itunes.apple.com/us/app/garageband/id408709785?mt=8

Google Translate
- https://play.google.com/store/apps/details?id=com.google.android.apps.translate&hl=en
- https://itunes.apple.com/us/app/google-translate/id414706506?mt=8

iMovie
- https://goo.gl/3rbdSs

Stop Motion Studio
- https://play.google.com/store/apps/details?id=com.cateater.stopmotionstudio
- https://itunes.apple.com/us/app/stop-motion-studio/id441651297?mt=8

Videolicious
- https://videolicious.com/
- https://itunes.apple.com/us/app/videolicious/id400853498?mt=8

Vine
- https://vine.co/
- https://play.google.com/store/apps/details?id=co.vine.android&hl=en
- https://itunes.apple.com/us/app/vine/id592447445?mt=8

WhatsApp
- https://www.whatsapp.com/

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of a scavenger hunt. Similar to the experience in Germany, the scavenger hunt required students to take pictures or record video and audio of interactions with others (e.g., teaching a sibling the German alphabet or holding a conversation in German with a family friend).

Both of these activities increased engagement and enhanced students' creativity and innovation; communication and collaboration; and critical-thinking, problem-solving, decision-making, and technology skills (International Society for Technology in Education, 2015). Students completed the audio and video assignments ahead of schedule, thus demonstrating high

The freedom to choose and the learning of a new, cool tool were highly motivating to students; increased completion rates; and enhanced technology, content, and practical skills.

❦

levels of motivation. Furthermore, students were eager to view or listen to each other's projects, adding another level of engagement that was unexpected. Students demonstrated the above-mentioned skills in the quality of work produced and the organization of the entire process from start to finish. Most student projects went above and beyond the basic requirements. Students had to arrange interviews, collaborate with classmates to assist with recording, make decisions about how best to present their work, and explore/learn new technologies outside of the classroom. Students utilized apps such as Apple's GarageBand, iMovie, Videolicious, audioBoom,

Stop Motion Studio, and Animoto (see Table 2). I was able to provide students with a list of apps, and before I knew it, they had taken responsibility for mastering those tools. Students accessed and learned how to use apps with ease. If needed, we would troubleshoot together, but the majority of them were able to use the apps' internal tutorials (help features) and create with no trouble. The freedom to choose and the learning of a new, cool tool were highly motivating to students; increased completion rates; and enhanced technology, content, and practical skills. It was very impressive to see students take responsibility for their own learning and make such huge strides in their abilities.

So Mobilize!

Just as with an international travel experience, mobile technologies can greatly enhance any learning experience. Whether in the classroom or out, mobile devices and apps will provide motivation, enhance and extend the learning, present students with unique opportunities, increase creativity, and allow learning to take place anywhere and anytime.

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References

International Society for Technology in Education (ISTE). (2015). *ISTE standards for students*. Retrieved from www.iste.org/standards/iste-standards/standards-for-students

Sharples, M., Taylor, J., & Vavoula, G. (2005). Towards a theory of mobile learning. In *Proceedings from mLearn 2005: The 4th World Conference on Mobile Learning*. Retrieved from www.mlearn.org.za/CD/papers/Sharples.pdf

Vavoula, G., & Karagiannidis, C. (2005). Designing mobile learning experiences. In P. Bozanis and E.N. Houstis (Eds.) *Lecture Notes in Computer Science 3746* (534–544). Retrieved from www2.le.ac.uk/Members/gv18/downloads/publicationpreprints/conference-proceedings/VavoulaKaragiannidis-PCI2005.pdf
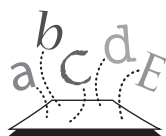
Fanfiction: Exploring In- and Out-of-School Literacy Practices

KELLY BAHORIC AND ELIZABETH SWAGGERTY

This article introduces the reader to the world of fanfiction and explores motivations for engaging in participatory culture, alignment with 21st century academic literacy skills, and reading and writing possibilities of fanfiction both in and outside of classroom walls.

Upon reading the final pages of a captivating book or watching the final episode of a favorite TV show, many people realize that they do not want the experience to end. Once a great deal of time is spent inside a fictional world, it can be difficult to part with it. Some describe the feeling of sadness that ensues after finishing an amazing book or book series as a "book hangover." The good news is that fictional universes do not have to end with a final period or rolling credits; they can continue to be explored through the medium of fanfiction.

Fanfiction (commonly abbreviated to "fanfic" or simply "fic") is a genre of text that is comprised of original stories created by fans of a work and incorporates canon elements of at least one fictional universe. However, authors of fanfiction do not simply follow the "blueprint" of the original work; rather, they incorporate elements of canon, such as plot, setting, and characters, and use these elements as a way to create new stories that extend upon the existing universe (Black, 2009b; Thomas, 2006).

To make literacy instruction more engaging and relevant to students in the classroom, teachers and education researchers are investigating out-of-school literacy practices such as reading and writing fanfiction (Curwood, 2013). This article introduces the reader to the world of fanfiction and its relation to classroom literacy instruction. Specifically, we address how fanfiction practices align with 21st century academic literacy skills and why participatory culture is highly motivating for students.

Fanfiction 101

Aside from the expectation of adherence to characterization and a basic level of plot canon (with the exception of crack fic, in which the work is intentionally illogical and ridiculous), there are no limits to fanfic writing. Fanfiction can be any genre, from adventure to romance, and can be as long as a novel. Authors often combine elements from multiple works to incorporate into his or her fanfiction. Thomas (2006) calls this fanfic genre a "crossover"; however, a fanfic is only considered a crossover when the characters from one universe interact with characters from another universe. For example, when the characters from MTV's *Teen Wolf* team up with Sam and Dean Winchester from *Supernatural* to defeat evil, paranormal entities. Fanfiction with elements from multiple source materials can be more aptly called alternate universe fic, or AU fic.

AU fic takes the characters from a particular work and places them in a different time and/or setting. There are many popular AU tropes that are frequently found across multiple fandoms. A *fandom* is a group of fans that is actively engaged with a work of media (e.g., the *Doctor Who* fandom) and its bodies of fanfiction. For instance, the coffee shop AU (or barista AU) is a highly popular AU among fanfiction communities. A coffee shop AU chronicles the interpersonal relationships among the characters as they work in a coffee house. Frequently, a coffee-shop AU will feature two of the characters meeting at the

featured coffee shop (typically one character works at the coffee shop and the other is a customer) and will explore the events that lead to an eventual romantic relationship between the two. Other examples of popular AUs are the high school AU, bakery AU, and 1920s AU. Another variation of an AU occurs when fanfic writers take the plot of one work and replace the characters of that work with characters from another work. For instance, a young fanfic writer, who goes by the handle of Sakura Gurl, wrote a fanfiction story using the setting and characters of the popular anime *Cardcaptor Sakura* and the plot from the movie *You've Got Mail* (Black, n.d.). In this example, the fanfic would be considered a *You've Got Mail* AU.

Other kinds of fanfiction include stories that are consistent with canon and stories that diverge from canon. Fanfiction that is consistent with canon can exist within the same realm of possibility as the canon universe and does not interfere with established events. One example would be a missing-scene fanfic in which the author depicts a scene that could have happened within canon events but was not shown explicitly to the audience. Fanfic that is canon divergent depicts alternate events than the established canon; however, these events are entirely probable. Typically an author will write a fanfic depicting events developing in the way he or she believes they should have. An author might also write speculatively and predict the direction of the canon that has not yet been established (for instance, the events in an upcoming season of a TV show). With canon-divergent fanfic, all events up until a certain point (that point being up to the author) are considered to be true and the author is writing the events that follow.

Authors of fanfiction explore conventions of multiple genres and rework established canon to create new stories. The works of popular culture that fans adore have become metaphorical literary sandboxes in which fanfic writers play.

Literacy Skills

Many fans read and/or write fanfic as a way to continue to explore and/or build upon the universe of his or her favorite TV show, video game, movie, and so on. In the following sections, we explore how fanfiction has potential to strengthen reading, writing, and 21st century skills.

Writing Fanfic

Fanfic authors gain valuable practice with the mechanics of writing. However, writing fanfiction is also

Writing fanfiction is also an exercise in experimentation and exploration with creative writing.

an exercise in experimentation and exploration with creative writing. The examination of genre and various styles of writing is an integral part of literacy studies, and members of fanfiction communities explore writing styles and genres through writing fanfic.

Genre exploration is a common practice among fanfiction writers (Black, 2009a). A fanfic writer might work within many genres of fiction to discover which genre he or she feels most comfortable writing. A fanfic writer might also write an array of fanfic stories from many genres. For instance, one author might have a high school comedy fanfic, a fantasy epic, and a thrilling mystery story as part of their body of work. The genre of a source series is not sacred to a fanfic author. With the popularity of AU fic within fanfiction communities, it is commonplace for fans to reimagine his or her favorite series with the conventions of another genre. Through genre exploration, fans learn to recognize common literary tropes (some examples being the love triangle or the comic-relief character) that they can use as a basis for plot. An author may even choose to subvert these tropes to create familiar stories with a new twist.

Teachers instruct students how to write in many styles, such as letters and journal entries, to expose students to the different purposes for writing. Fanfic writers dabble with various styles of writing as they develop their unique writing styles. When they experiment with an assortment of writing styles, fanfic writers discover different ways to tell a single story. For example, a fanfic writer might develop a fanfic in a series of letters or a diary format or even experiment with different points of view (this can be using first, second, and third person or switching between multiple characters' points of view throughout the fanfic). Fanfic writers have even pioneered new styles of writing that are widely used throughout fanfiction communities. One such style is the 5 times fic, or the 5 + 1 fic, which is a common variation. A 5 times fic is written as five short scenes that each depict a recurring situation for the featured character or characters. One example could be five times that Cecil and Carlos (characters from the popular podcast, *Welcome to Night Vale)* went on a date. Not only are fanfic authors exploring with different styles of writing, but they are creating new writing styles as well.

Young people are learning valuable literacy skills through reading and writing fanfiction. These skills are aligned with proficiencies that are taught in the classroom, thus making fanfiction a viable tool for teachers to implement for literacy instruction.

Readers approach fanfiction with a wealth of background knowledge about the work that the fanfic is based on. Fans use this background knowledge to critically analyze the characterization, plot elements, and logic (which can include a logical pacing of events or the established logic of a universe, for instance, the rules of magic in *Harry Potter)* to determine whether it is consistent with the canon. There is a certain degree of inconsistency that fans will allow, such as deviation from the canon plot with AU fic, but when the fanfic is too inconsistent with canon, the reader will not likely continue reading it.

One way to engage students in literacy practices is to provide access to texts that are relevant to students' interests. Curwood (2013) notes that it is important for teachers to take students' interests into account when planning literary activities. For teachers, trying to appeal to every student can be a difficult task, considering how varied students' interests can be. Fanfiction can be relevant to every student in the classroom because there is fanfic for nearly every medium that is popular among young people. Using fanfiction in the classroom can give every student the opportunity to critically engage in a text that is meaningful to him or her.

Reading Fanfic

Writers of fanfiction are readers of fanfiction, but there are many readers of fanfiction who do not write it. Most researchers discuss the practice of writing fanfiction, with less attention to the practice of reading fanfiction. Curwood (2013) states that "a personally meaningful and enjoyable experience with literature" is ideal for bolstering students' reading skills (p. 418). Fanfiction offers a wide array of readings based on popular culture works that interest students, thus offering many opportunities for students to read a work of fiction that is meaningful to him or her.

Young people read fanfiction for fun and relaxation (Chandler-Olcott & Mahar, 2003); however, this does not mean that fans are not looking critically at the text. When one approaches a text of a particular subject, he or she accesses prior knowledge of the subject to enhance comprehension of the text. If a reader does not have prior knowledge of the subject, he or she is likely to have more difficultly comprehending the text and may give up reading it entirely. This idea can also be applied to fanfiction.

21st Century Skills

Students who read and write fanfiction are clearly developing their reading and writing skills through authentic writing practice with a real audience; however, they are also learning important 21st century skills (Black, 2009a, 2009b; Curwood, 2013). The Common Core State Standards' (National Governors Association Center for Best Practices, 2010) stipulation that students create and share their own digital writing puts this 21st century learning goal in the spotlight (Kist, 2013). Teachers are tasked with creating lessons that not only teach content, but also prepare students for life in the 21st century. The framework for 21st century skills includes mastery of core subjects; learning and innovation skills, such as creativity and collaboration; information, media, and technology skills;

and life and career skills, such as self-directed learning and working with others as well as independently (P21, Partnership for 21st Century Skills, n.d.). Fanfiction practices align with skills outlined in the framework developed by P21 (Black, 2009a, 2009b; Curwood, 2013; Lammers, Curwood, & Magnifico, 2012). As literacy practices shift from print based to digital, teachers are incorporating digital literacy practices into classroom education. Fanfiction is one such digital literacy practice that teachers can incorporate into literacy instruction.

Fanfiction practices occur almost exclusively in online spaces and are highly social in nature, which aligns with ICT (Information and Communication Technologies) literacy and communication and collaboration skills. Fans navigate online spaces and use technology to read, write, and respond to fanfiction. They communicate with one another to critique each other's fic stories, engage in meaningful discussions about the series they enjoy, and even collaborate on writing projects together (Thomas, 2006).

Fanfiction, by nature, aligns with media literacy skills. The practice of fanfic writing itself is an analysis of the media that the fanfic is based on and allows young people to explore themes that are often unaddressed in popular media (including the media that fans love) and to rework media in a way that is more relevant to his or her own experiences (Black, 2009b). Through writing, fans are challenging what the media deems to be a worthy story. Black terms this critical engagement with media through fanfiction "critical media literacy" and situates it within the 21st century framework (p. 75). By looking critically at the problematic elements of and within today's media, students learn not to be passive consumers of information. Rather, they learn that media can be questioned and challenged. Black (2009b) states that "critical interrogation, redesigning texts, and pushing the boundaries of media are common in the ethos of many fan communities" (p. 76).

Black (2009b) explains that because young people are already addressing important social issues in fanfiction, there is "a clear need for youth to have opportunities for engaging in critical discussion of the various texts they encounter" (p. 78). Black further suggests that teachers impart their expert knowledge with the media to guide these critical discussions. Media literacy is an important 21st century skill, and fanfiction takes media literacy a step further by allowing students to use writing to challenge current media.

Media literacy is an important 21st century skill, and fanfiction takes media literacy a step further by allowing students to use writing to challenge current media.

Motivation and Engagement

Motivating students to read is one of the greatest challenges that teachers face. In the classroom, students may be reluctant to read, but outside of the classroom, students engage in many valuable online literacy practices (Lammers, et al., 2012), one of which is fanfiction. Fanfiction is a highly motivating practice for students. Many researchers agree that the social aspect is one of the reasons fic practices are so highly motivating (Alvermann, 2008; Black, 2009a, 2009b; Chandler-Olcott & Mahar, 2003; Curwood, 2013; Kell, 2009; Lammers, et al., 2012; Mackey & McClay, 2008; Thomas, 2006). Students enjoy reading one another's fanfic writing, giving feedback, and learning from each other to grow as fanfiction authors.

Fanfiction spaces "serve an important role for exploring issues of identity and empowerment" (Thomas, 2006, p. 236). Black (2009b) discusses how fanfiction writers incorporate their own experiences into their writing. Young people also use fanfic as a way to explore relevant issues such as peer pressure and interpersonal relationships (Black, n.d.). These practices allow them to discover their emerging identities in a way that is nonthreatening. Fanfic writing is within a realm of make-believe where young people can sort through personal emotions vicariously through their favorite fictional characters. Fanfic writing can be considered a cathartic practice in this sense. As young people navigate the often confusing and difficult world of adolescence, it is easy to see why young people choose fanfiction as a creative and emotional outlet for self-discovery.

It is also simply motivating for students to write stories based on media that they already know and love. Students are excited about their favorite TV shows, movies, books, and so on, and this enthusiasm makes "an excellent learning environment" (Kell, 2009, n.p.).

Fanfiction in Classroom Instruction

Fanfiction practices align with the literacy skills that are taught in K–12 classrooms (Alvermann, Marshall, McLean, Huddleston, Joaquin, & Bishop, 2012; Black, 2009b; Black, n.d.; Chandler-Olcott & Mahar 2003; Lammers, et al., 2012), but there is some disagreement as to whether fanfiction should be a practice that is integrated into classroom instruction. Jacobs (2012) cautions teachers

Table 1. Fanfiction Genres for Various Grade Levels	
Fanfiction Genre	**Description and Example**
Alternate Universe: Coffee Shop	Coffee Shop AUs take familiar characters of a series and imagine them as employees and customers of a coffee shop. This fanfic is also Real Person Fanfic (RPF) in which the author uses real people, instead of characters, to write his or her AU. In RPF, the people are usually celebrities. In the example below, actors Jesse Eisenberg and Andrew Garfield are the main characters. **Example:** http://passe-simple.livejournal.com/30639.html *Caution:* There are a few instances of inappropriate language.
Alternate Universe: Plot Switch	Some fanfic writers take the plot of one work and replace the characters of that work with characters from another work. In this example, characters from the popular anime Free! join the Jaeger Program and fight Kaiju, making this a Pacific Rim AU. **Example:** http://archiveofourown.org/works/1109176
5 Times Fic	A 5 times fic (also called 5 + 1 fic) is written as five short scenes that each depict a recurring situation for the featured character or characters. **Example:** http://archiveofourown.org/works/1106904
Hurt/Comfort	Hurt/Comfort fanfic involves at least one character that is injured, sick, or dealing with emotional issues. The fanfic will chronicle this character's journey to recovery. **Example:** http://archiveofourown.org/works/1489912
Alternate Universe: High School or College/University	High School or College AUs take characters and place them in a high school or college setting. In canon, these characters are typically too young or too old to be attending high school or college, or the characters are not in either of these settings due to other circumstances (for instance, if the series is set during medieval times). These types of fanfic chronicle the characters as they face typical high school/college problems such as keeping up with academics, bullying, and interpersonal relationships. A less frequent spin on this AU depicts the characters as high school teachers or college professors. **Example:** https://www.fanfiction.net/s/9574956/3/Those-That-Can-t-Do *Caution:* There are a few instances of inappropriate language.
Crossover	Crossovers are distinct from plot switch AUs because these types of fanfic involve the characters from at least two series interacting with one another. Authors often explore the interesting dynamics between characters from different universes. **Example:** https://www.fanfiction.net/s/9653711/8/Laoich *Caution:* There are a few instances of inappropriate language.
Missing/Deleted Scene Fanfic	Sometimes fans have their own ideas for scenes that should have appeared in their favorite series. Missing/Deleted Scene fanfic depicts a scene from a series that was not present in canon, but the author believes it should have taken place. Authors can extend on existing canon by writing these types of fanfic. **Example:** http://archiveofourown.org/works/1523867

Table 2. Suggested Activities and Integration Ideas for the Classroom	
Suggested Grade Level(s)	**Activity/Suggestion for Integration**
K–12	The teacher provides appropriate fanfic on a class website so students can become more familiar with fanfiction without exposing them to sites where fanfic may be inappropriate.
K–12	The teacher creates a private blog space where students can publish fanfiction and leave comments for one another. It would not be advised to have students post fanfiction to established fanfiction sites because anyone would have the ability to read and post comments. A private blog allows students to showcase their work and receive peer feedback, as they would on an established site, but in a more safe and structured environment.
Elementary	The teacher reads part of a story or shows part of a film. The students write to continue the narrative. Grade level and skill ability can determine the length of the writing.
Elementary	Students choose a character from a familiar narrative and the students write a new adventure for that character. Teachers can determine how much freedom students have when choosing, such as limiting the character choices to book characters versus allowing for choice from all types of media.
Elementary and Middle	The teacher uses a mentor text to introduce one or a few types of fanfic and allows students to emulate the format. For instance, the teacher can select an example of a missing scene fanfic and have the student write his or her own missing scene fanfic for a story of his or her choosing.
Middle and High School	Students take a familiar story and rewrite it with conventions of another genre. Teachers can choose the genre (a good idea when students are learning conventions of a particular genre) or the story students are asked to transform.
High School	Students identify a problem within a particular work and write a fanfiction that attempts to address or rectify the problem. An example could be a work in which a character of a particular race or ethnic group is portrayed as a stereotype. A student could write a fanfiction where that character is portrayed in a more respectful way.

who assume that simply engaging in online literacy activities is inherently motivating because of the use of technology. The effectiveness of the activity is reliant on students' interest in the activity itself, not just the technology. Additionally, Black (n.d.) and Chandler-Olcott and Mahar (2003) warn that implementing fanfiction literacy activities into instruction might diminish its appeal for those who voluntarily participate in fan culture outside of school.

However, with thoughtful planning and proper guidance from teachers, fanfiction can be incorporated into literacy instruction in K–12 classrooms. First and foremost, teachers should consider the kinds of fanfic students will have access to. Mackey and McClay (2008) warn that much fanfiction is characterized by material such as explicit sexual situations, which is not suitable for use in school. Browsing fanfiction sites would be an ill-advised practice for younger students, although this activity might be suitable for older students at the teacher's discretion. Teachers

of all grade levels should examine fanfiction sites to find suitable mentor texts, or example texts, that are school appropriate. Table 1 features a list of example fanfiction genres that are school appropriate for various grades.

Fanfiction is intrinsically linked with popular media, therefore teachers should consider media as a subject when integrating fanfiction into the classroom. The practice of writing fanfiction is as much a means of critical analysis as it is an exercise in enhancing reading and writing skills. Thus, the study of media itself can be beneficial for students to utilize fanfiction practices on a much deeper level of engagement. Teachers can facilitate a discussion on the problems within popular media (problems such as gender bias, underrepresentation of certain races/ethnicities, stereotypes, etc.) and introduce fanfiction as a means of responding to those issues. The depth of discussion and the specific problems addressed depend on the age of the students. Older students could discuss

more controversial issues and address issues at greater lengths, whereas a teacher of younger students may have to omit some issues from the discussion entirely. Teachers can guide the discussion accordingly based on the maturity of the students and specific school policies. The authors believe that teaching students to look critically at popular media will provide for deeper engagement and thinking with fanfiction practices in the classroom.

Teachers should also consider becoming familiar with media that is popular among his or her students. Teachers may discover that it's easier to find quality mentor texts when he or she has some background knowledge of the original media. Having background knowledge will allow for enhanced comprehension of student-written fanfiction. In addition, teachers will be able to provide informed suggestions for improvement or ideas for brainstorming new writing.

Table 2 lists some suggested activities and integration ideas for the classroom, including recommended grade levels for each activity.

Closing Thoughts

Teachers can capitalize on the self-directed and critical thinking skills inherent in fanfiction literacy practices because it is already widely popular among today's young people, is motivating, and aligns with many literacy and 21st century skills that students need to learn to be successful in literacy endeavors in and out of school. Inarguably, fanfiction has potential to be a powerful literacy practice in the real world and at school. Teachers should consider its affordances as they work to prepare students to read, create, and share content as authentic consumers and contributors in both settings (Botzakis, Burns, & Hall, 2014).

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References

Alvermann, D.E. (2008). Why bother theorizing adolescents' online literacies for classroom practice and research? *Journal of Adolescent & Adult Literacy, 52*(1), 8–19. doi:10.1598/JAAL.52.1.2

Alvermann, D.E., Marshall, J.D., McLean, C.A., Huddleston, A.P., Joaquin, J., & Bishop, J. (2012). Adolescents' web-based literacies, identity construction, and skill development. *Literacy Research & Instruction, 51*(3), 179–195. doi:10.1080/19388071.2010.523135

Black, R.W. (2009a). English-language learners, fan communities, and 21st-century skills. *Journal of Adolescent & Adult Literacy, 52*(8), 688–697. doi:10.1598/JAAL.52.8.4

Black, R.W. (2009b). Online fan fiction and critical media literacy. *Journal of Computing in Teacher Education, 26*(2), 75–80.

Black, R.W. (n.d.) *Online fanfiction: What technology and popular culture can teach us about writing and literacy instruction.* Retrieved from http://education.jhu.edu/PD/newhorizons/strategies/topics/literacy/articles/online-fanfiction/

Botzakis, S., Burns, L.D, & Hall, L.A. (2014). Literacy reform and Common Core State Standards: Recycling the autonomous model. *Language Arts, 91*(4), 223–235.

Chandler-Olcott, K., & Mahar, D. (2003). Adolescents' anime-inspired "fanfictions": An exploration of multiliteracies. *Journal of Adolescent & Adult Literacy, 46*(7), 556.

Curwood, J. (2013). The Hunger Games: Literature, literacy, and online affinity spaces. *Language Arts, 90*(6), 417–427. Retrieved from: www.ncte.org/library/NCTEFiles/Resources/Journals/LA/0906-jul2013/LA0906Hunger.pdf

Jacobs, G.E. (2012). Rethinking common assumptions about adolescents' motivation to use technology in and out of school. *Journal of Adolescent & Adult Literacy, 56*(4), 271–274. doi:10.1002/JAAL.00139

Kell, T. (2009). Using fan fiction to teach critical reading and writing skills. *Teacher Librarian, 37*(1), 32–35.

Kist, W. (2013). New literacies and the Common Core. *Educational Leadership, 70*(6), 38–43.

Lammers, J.C., Curwood, J., & Magnifico, A. (2012). Toward an affinity space methodology: Considerations for literacy research. *English Teaching: Practice & Critique, 11*(2), 44–58. Retrieved from http://education.waikato.ac.nz/research/files/etpc/files/2012v11n2art3.pdf

Mackey, M., & McClay, J. (2008). Pirates and poachers: Fan fiction and the conventions of reading and writing. *English in Education, 42*(2), 131–147. doi:10.1111/j.1754-8845.2008.00011.x

National Governors Association Center for Best Practices, Council of Chief State School Officers (2010). Common Core State Standards for English language arts and literacy in history/social studies, science, and technical subjects. Washington, DC: Authors. Retrieved from www.corestandards.org/ela-literacy

P21, Partnership for 21st Century Skills (n.d.). F*ramework for 21st century learning.* Retrieved from www.p21.org/our-work/p21-framework

Thomas, A. (2006). Fan fiction online: Engagement, critical response and affective play through writing. *Australian Journal of Language & Literacy, 29*(3), 226–239.

Spelling and Morphology—Keys to Vocabulary Instruction and Learning

Shane Templeton

This article provides tips for improving students' spelling through vocabulary knowledge. It's packed with powerful examples of the concepts to be taught.

In the Common Core English Language Arts (ELA) standards (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010), an anchor standard for "Vocabulary Acquisition and Use" states that students should be able to "Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts…" (p. 25). That last part, "analyzing meaningful word parts," is the stuff of morphology: It has to do with the meaningful "building blocks" of words—morphemes, the smallest units of meaning in the language. Morphological analysis is based on teaching learners how those meaningful word parts combine—*prefixes, suffixes, base words,* and *Greek and Latin word roots*—to result in the meaning of words.

Of course, an emphasis on understanding how meaningful word parts combine has always been prominent in ELA standards over the years, including Colorado's. Linguists estimate that from 60% to 80% of English vocabulary consists of words that have been created through processes of morphology (Nagy & Anderson, 1984; Tyler & Nagy, 1989), and in the late elementary grades and beyond, more than 90% of the vocabulary in specific disciplines or content areas comprises Greek and Latin elements (Green, 2008). Because most words in English have been formed by combining word parts, and because many of these words also represent key concepts and understandings across a wide range of content areas and disciplines, students who understand these basic processes will have a significant advantage in accessing new meanings and constructing appropriate

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meanings in texts. This type of understanding is referred to as generative vocabulary knowledge (Templeton, 2011/2012). For example, through the addition of prefixes and suffixes, the following related words may be generated from the single word *predict: predicted, predicting, predictable, predictability, unpredictable, unpredictably, unpredictability, unpredicted, prediction, predictions, predictor, predictive,* and *unpredictive.*

Morphology is an area, however, about which many teachers are not as comfortable teaching as they are a number of other areas of literacy. One reason for this may be uncertainty about the content and pedagogy of morphology (Moats & Smith, 1992; Templeton, 2004). The Common Core ELA standards, reflecting many years of research in this area, provide the outlines of a scope and sequence. A number of other resources provide much more specific content as well as teaching guidance (e.g., Bear, Invernizzi, Templeton, & Johnston, 2012; Templeton et al., 2015). In this article, I will discuss how attention to spelling can facilitate morphological development.

Morphology and Spelling

Linguist Mark Aronoff observed that "From a teacher's point of view, morphology is important for two major reasons: spelling and vocabulary…" (1994, p. 820–821). How are the two areas of morphology and spelling connected? Examining spelling helps students become aware of morphology, attention to morphology expands vocabulary growth, and the circle is completed when vocabulary growth supports students' further spelling development.

This relationship begins early. For example, primary grade children learn about the combination of simple bases and affixes *(break/breakable/unbreakable),* but teachers may plant the seeds of curiosity as words created with Greek and Latin components come up in units of study. For example, teachers may share that so many words come from the Greek language spoken more than 2,000 years ago—words such as *tyrannosaur* ("tyrant lizard") and *pterodactyl* ("fingered wing," from *pter*, wing + *dactyl*, finger). But again, the more systematic exploration of these "deeper" layers of morphology won't get underway until the intermediate grades (Templeton & Gehsmann, 2014). It's important to note that, though the relationship between spelling and morphology is not as strong as it will be in the intermediate grades, appropriate and engaging spelling instruction will support reading development at this level (Graham & Santangelo, 2014; Perfetti, 1997). And reading, in turn, will increasingly provide the vocabulary that lends itself to morphological analysis.

In the intermediate grades, we introduce and develop students' awareness of the spelling–meaning connection and describe it for them this way: *Words that are*

> *Teachers can guide students to an understanding of the spelling–meaning connection to understand how it operates across the vocabulary of English.*

related in meaning are often related in spelling as well, despite changes in sound (Templeton 1983, 2003). Students' understanding of this spelling–meaning connection takes morphological knowledge to a higher level: Where they were earlier exploring words in which little if any sound change occurred *(break/breakable/unbreakable),* they are now exploring words in which there *is* a sound change—but in which the spelling visually retains the meaning relationships despite this change *(courage/courageous; muscle/muscular).* In third grade, the Common Core State Standards (CCSS) expect that *derivational suffixes* will be introduced. These are affixes that change the part of speech of the base or root to which they are attached. They are termed *derivational* because they work to derive a number of related words from a single base word or root word—for example, *-ly, -ment,* and *-ous.*

How the Cookies Crumble

Teachers can guide students to an understanding of the spelling–meaning connection to understand how it operates across the vocabulary of English (Templeton, 2011, 2011/2012, 2012). As with all aspects of word study, we begin with known words. Those with so-called "silent"

consonants are likely to engage students' attention. Consider the following vignette:

> Write the word *crumb* on the board. Step back and ask students "Now, why did they do that? Why in the world is that 'b' on the end? Why didn't they just spell it as *crum?*" As students grumble right along with you, write the word *crumble* directly below *crumb*:

> <div align="center">

> *crumb*

> *crumble*

> </div>

> "Hmm...That's interesting. Are *crumb* and *crumble* related in meaning?" (It may be necessary to use an example like "when cookies are *crumbled*, all that's left are the *crumbs.*") When students realize that the words are related in meaning, point out that we hear the "b" in *crumble* but not in *crumb,* but the spelling of *crumb* keeps the *b* at the end to show that it is related to *crumble.*

> Next, share another example: Writing the word *sign* on the board, mention that "Sometimes we use a stop *sign* to tell people to stop at an intersection." Then write the word *signal* underneath as you say "other times a *signal* is used":

> <div align="center">

> *sign*

> *signal*

> </div>

> Again, discuss how these two words are related in their meanings. "Even though we don't hear a 'g' in *sign*, we keep it in the spelling to show how it shares a meaning relationship with *signal.*" You might also point out that the long *i* in *sign* becomes a short *i* in *signal*, but the spelling of these sounds doesn't change. Why? "Because the spelling keeps the *visual* similarity between words that share similar meanings."

This feature of English spelling—it visually preserves the meaning elements, the morphemes, in words—allows us to "decode" unfamiliar words that we encounter in our reading. The results of this decoding more often are a tentative meaning for a word that is not in our speaking/listening vocabulary. For example, a student who knows *analogy* but runs into the word *analogical* may not be certain how to pronounce it—it's unlikely she has heard it before, anyway—but can decode its meaning if she has been taught to think of words she knows that are spelled, that look like, this unknown word.

We should also demonstrate how an awareness of the fact that spelling visually preserves the meaning relationships among words can help students with their spelling. For example, consider the following misspellings of a sixth-grade student:

<div align="center">

defanition

oppisition

</div>

Showing them the words from which these misspelled words are derived, we provide the clue to remembering the spelling of these words. In the words *define* and *oppose*, the long vowel sound is clearly heard, providing the clue to the spellings in the problematic second syllables of *definition* and *opposition*.

Expanding Vocabulary to Improve Spelling

After students have explored the spelling–meaning connection among words they already know—*define/definition* and *oppose/opposition*—we can help them apply this awareness to their vocabulary development. For example, consider the situation in which an intermediate student has spelled *mental* as *mentle*. When we think only in terms of spelling *sound*, we may despair that there are different ways to spell the /el/ syllable *(-le, -el, -ile, -al)* and how do we know which spelling to use? When we think in terms of *meaning*, the ambiguity is removed; we show the related word *mentality*:

<div align="center">

mental

mentality

</div>

Because of the way English works, when the derivational suffix *-ity* is added to a base word, it shifts the stress or accent within the word. When added to *mental*, it shifts the stress to the second syllable, and in the process the vowel sound is highlighted: *mentALity*. The student knows how to spell this stressed syllable, and it is the clue to the spelling of the second syllable in *mental*. The big difference between *mental/mentality* and *define/definition*, however, is that most intermediate students know the meaning of both *define* and *definition* but, though they know the meaning of *mental*, do not know the word *mentality*. In fact, it will not be until they are sophomores in high school that over half of them will know the meaning of *mentality* (Biemiller, 2010). So, you are able to expand students' vocabulary by addressing a spelling error—the known word *mental*, though misspelled, can be explained by showing the unknown word *mentality*—and not only is the spelling cleared up, but in the process you have expanded the student's vocabulary.

As you explore morphology with your students through these spelling–meaning relationships, examination of Greek and Latin roots is ongoing. At grade 4 in the CCSS, the terrain to be explored expands quite a bit—students, for example, are expected to "Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word" (National Governors Association Center for Best Practices, 2010, p. 29). As examples, Common Core offers the words *telegraph* and *autograph* and these examples are appropriate, comprising Greek word parts, which are usually clearer to students because their meanings are fairly concrete: *graph* means "write," and *tele* means "far away"—so, as students learn about the telegraph and its role in American history, it becomes clear that it quite literally refers to "writing from far away." Through Greek and Latin *word roots*, the generative power of morphology increases quite significantly. Recall our initial example of the word *predict*—it is composed of two morphemes, the prefix *pre-* and the word root *dict* (from the Latin word meaning "to say or speak"); *predict*, quite literally, means "to say before." We explain this to students in terms of "When you *predict* something will happen, you literally *say* it will happen *before* it occurs."

Final Thoughts

As I hope has been suggested through the few examples offered in this article, building upon spelling to develop morphological knowledge will develop students' *generative* vocabulary—supporting their learning of important new vocabulary you explicitly teach as well as enabling them to learn thousands of additional words independently as they read. And along the way, their spelling is likely to improve as well as their overall reading ability.

Shane Templeton *is foundation professor emeritus of literacy studies at the University of Nevada, Reno. A former classroom teacher at the primary and secondary levels, his research has focused on the development of spelling and vocabulary knowledge, and his books include* Words Their Way, Vocabulary Their Way, *and with Kristin Gehsmann,* Teaching Reading and Writing: The Developmental Approach. *Dr. Templeton is a member of the Usage Panel of the* American Heritage Dictionary *and wrote the foreword to* Curious George's Dictionary, *both published by Houghton Mifflin Harcourt.*

References

Aronoff, M. (1994). Morphology. In Purves, A.C., Papa, L., & Jordan, S. (Eds.), *Encyclopedia of English studies and language arts, Vol. 2* (pp. 820–821). New York: Scholastic.

Bear, D.R., Invernizzi, M., Templeton, S., & Johnston, F. (2012). *Words their way: Word study for phonics, vocabulary, and spelling instruction* (5th Ed.). Boston: Pearson/Allyn & Bacon.

Biemiller, A. (2010). *Words worth teaching: Closing the vocabulary gap.* Columbus, OH: McGraw-Hill.

Graham, S., & Santangelo, T. (2014). Does spelling instruction make students better spellers, readers, and writers? A meta-analytic review. *Reading & Writing, 27*(9), 1703–1743.

Green, T.M. (2008). *The Greek and Latin roots of English* (4th Ed.). Lanham, MD: Rowman & Littlefield Publishers.

Moats, L., & Smith, C. (1992). Derivational morphology: Why it should be included in assessment and instruction. *Language, Speech, & Hearing in the Schools, 23,* 312–319.

Nagy, W., & Anderson, R.C. (1984). How many words are there in printed school English? *Reading Research Quarterly, 19,* 304–330.

National Governors Association Center for Best Practices, Council of Chief State School Officers. (2010). *Common Core State Standards for English language arts and literacy in history/social studies, science, and technical subjects.* Washington, DC: Authors.

Perfetti, C.A. (1997). The psycholinguistics of spelling and reading. In C.A. Perfetti, L. Rieben, & M. Fayol (Eds.), *Learning to spell: Research, theory, and practice across languages* (pp. 21–38). Mahwah, NJ: Lawrence Erlbaum Associates.

Templeton, S. (1983). Using the spelling/meaning connection to develop word knowledge in older students. *Journal of Reading, 27,* 8–14.

Templeton, S. (2003). The spelling–meaning connection. *Voices From the Middle, 10* (3), 56–57.

Templeton, S. (2004). The vocabulary–spelling connection: Orthographic development and morphological knowledge at the intermediate grades and beyond. In J.F. Baumann & E.J. Kame'enui (Eds.), *Vocabulary instruction: Research to practice* (pp. 118–138). New York: Guilford Press.

Templeton, S. (2011). Teaching spelling in the English/language arts classroom. In D. Lapp & D. Fisher (Eds.), *The handbook of research on teaching the English language arts* (3rd ed.) (pp. 247–251). IRA/NCTE: New York: Routledge.

Templeton, S. (2011/2012). Teaching and learning morphology: A reflection on generative vocabulary instruction. *Journal of Education, 192*(2/3), 101–107.

Templeton, S. (2012). The vocabulary–spelling connection and generative instruction: Orthographic development and morphological knowledge at the intermediate grades and beyond. In J.F. Baumann & E.J. Kame'enui (Eds.), *Vocabulary instruction: Research to Practice* (2nd ed.) (pp. 116–138). New York: Guilford Press.

Templeton, S., Bear, D.R., Invernizzi, M., Johnson, F., Flanigan, K., Townsend, D.R., Helman, L., & Hayes, L. (2015). *Vocabulary their way: Word study with middle and secondary students* (2nd ed.). Boston: Pearson.

Templeton, S., & Gehsmann, K. (2014). *Teaching reading and writing: The developmental approach (preK–8).* Boston: Pearson.

Tyler, A., & Nagy, W. (1989). The acquisition of English derivational morphology. *Journal of Memory & Language, 28,* 649–667.

Studio Shoes and Moo Puns:
An Inside Look at the Life and Work of Author and Illustrator Tom Lichtenheld

CHRISTINE D. KYSER

Step into the world of a picturebook author/illustrator through this informative interview and discover Lichtenheld's passion for writing and drawing children's books.

Tom Lichtenheld is an author and illustrator whose spirit, wit, and talent come alive in the 24 children's picturebooks he's published, five of which have been on the *New York Times* Best Seller List. Personally, I have many literary heroes, and Lichtenheld was initially added to my list with his *Duck! Rabbit!* in 2009, which he collaborated on with Amy Krouse Rosenthal. In March of this year, Lichtenheld released two books: *Stick and Stone,* written by Beth Ferry, and *I Wish You More,* written by Rosenthal. Lichtenheld presented at the 2015 CCIRA Conference on Literacy, and I left his session both intrigued with his creative process and in awe of his sincere admiration of those authors and illustrators whose work he so candidly admires.

It is authors and illustrators like Lichtenheld that make teachers' jobs of sharing their passion for literacy so easy. When I read Lichtenheld's *What Are You So Grumpy About?* or *The OK Book* to a group of students, I can't contain my enthusiasm. I love that feeling during a great read-aloud where you don't have to "sell" the book to listeners because your excitement for the next page is completely natural. I ("CK" in the following interview) recently met with Tom in the hopes of catching a glimpse into the world of the man who creates these experiences for readers.

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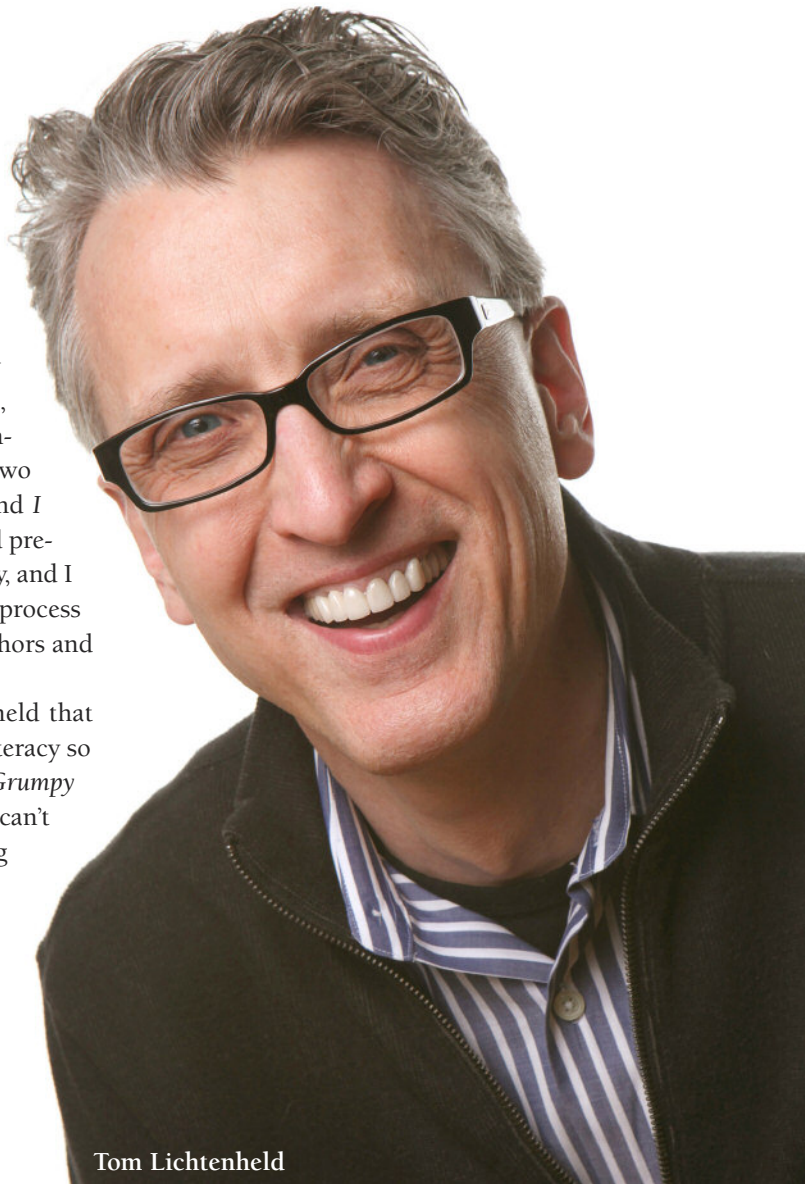
Tom Lichtenheld

CK: Describe a day in the life of Tom Lichtenheld.

Tom: That's a good question because children's books are my second career. I come from the advertising world—a job where I had to keep regular hours—and I think the discipline of having to go to a regular job most of my career has really helped me. Writing and illustrating children's books is a job for me, and I show up for work every day. I work long hours and I try to be somewhat efficient about it. I know many authors and illustrators who struggle with the discipline of the work. As a third grader once said to me, "Yeah, but who makes you write and illustrate books?" It was such a great question from a kid because they are the ones who get bossed around all the time by grown-ups. And here I am—I just talk about how I'm in my studio all day and I'm by myself and there's no one to boss me around.

This may sound silly, but I have a rule that I have to wear shoes in my studio. What that really means is that I can't come up here in my pajamas and then spend all day loafing around. I get dressed in the morning and I go to work. And I say to my wife, "Okay, I'm going to work now," and I walk up the stairs and I'm at work. My wife works with me quite a bit, and we have some structure to our day; for instance, we have meeting times at 10:30 a.m. and 2:30 p.m., but we have certain rules as well. If we want to talk about something, we'll ask for a meeting. We have meeting times to keep us from treating it willy-nilly, barging in on each other every time we feel like it.

A typical day for me starts around 7:30 or 8:00. Sometimes, a large portion of my day consists of doing things other than writing and illustrating, like contract reading and negotiations, scheduling, working out computer problems, marketing, or making travel arrangements. That's especially true surrounding a new book release. So there are days when I don't get around to drawing until 2:00 in the afternoon, which is kind of frustrating, but there's a lot of other stuff that has to be taken care of. Ironically, the more I do this, the more that stuff comes up because there's more requests and there's just more demand.

Even though my day usually starts around 8:00, I often have ideas earlier in the morning, and I'll jump out of bed, run to the studio, and scribble it out real fast. I might spend half an hour before breakfast scribbling out an idea while it's still fresh in my mind. I'll often work until noon on "studio stuff," have lunch, and then try to only

I have a rule that I have to wear shoes in my studio.

make books in the afternoon. Evenings are great for drawing and painting and writing. If I'm really up against a deadline, I'll get up and start working in the wee hours of the morning. I'm not a real good night owl, but I just love that time between 4:00 in the morning and 8:00. It's what I call "time out of time," when the world seems to be standing still. So, my day is full of a variety of things.

CK: So you don't work in your bunny slippers?

Tom: No, I don't have any bunny slippers. I do have what I call studio shoes. I've got two pairs of super cheap tennis shoes from Target, and I alternate wearing one or the other pair of my studio shoes. They are not for public display.

CK: You discussed many of your favorite books during your presentation at the 2015 CCIRA Conference. Are there specific books that you draw upon? Do you use any of these as mentor texts?

Tom: Yes, I would say so. And when I say "draw upon," I use others people's books for two things: (1) to inspire me, and (2) to set a standard. These books give me a benchmark for what can be done. When I talk to students, I say, "You should always set your standards higher than your ability, so you're always reaching to be better than you are." It can be frustrating, but that's how you improve.

I've got a kind of rolling library cart in my studio. And in it, I keep books that inspire me and I look at them and say, "Darn, why can't I be as good as that?" For the most part, the books that I admire are at either end of a spectrum: at one end are books that are soft or poignant and meaningful and rich; at the other end are books that are crazy and energetic and seemingly insane but have a purpose, which is really important to me. A book that is crazy must also have a purpose. A book on that pile is *The Scrambled States of America* by Laurie Keller because it's just nuts. Her mind must have all this crazy stuff bouncing around it, but when you study the book, you see that it's not all nuts. It is a great book to understand geography. The book is chock-full of creative silliness, like California couldn't live next to Wisconsin because California was lactose intolerant. That's just funny.

So I've got books that set a benchmark for me. A lot of these books are obscure. When I feel I've lost my sense of humor and I'm not funny enough, I go to this book by Delphine Durand, *My House*. It's crazy. It's just jam packed with made-up characters. And all the characters are just silly and there's joking around. Even though it didn't have high

sales, I am inspired by it—it's basically a tour through her mind, full of insane characters and inside jokes, and if you really spend time with the book, there's a cogency to it.

Another obscure but inspiring book by a well-known author is *The Day I Swapped My Dad for Two Goldfish* by Neil Gaiman. This picturebook is ahead of its time. The illustration technique is a combination of painting and Photoshop, and it's just brilliant. It's a funny, funny story about a kid and his dad, and his dad was really boring just sitting around reading the newspaper all day, so the kid traded him for a goldfish; and then the next kid traded the dad for a guitar; and then the next kid traded dad...that was just so much more interesting. The dad was just sitting around reading the newspaper all the time and Dad didn't know he got traded. And then the kid that got the dad realized how boring Dad was, so he traded the dad to somebody else for a guitar. And then it goes on and on and on, and Dad gets further away from the kid. And then Mom comes home and asks, "What did you do with Dad?" And he tells his mom and Mom says to go get Dad right now. So the kid has to retrace the steps to go get Dad...until Mom comes home. It's a brilliant concept that's wonderfully executed. It reminds me how far you can stretch reality because it's completely ridiculous, but it's also got some truth to it. People can be really boring when they just sit around and read newspapers.

A new book that I just discovered is *29 Myths on the Swinster Pharmacy* by Lemony Snicket. It's a beautiful little book done in watercolor. It's mythology about an ordinary place in an ordinary town with mythology made up by kids. What I love about it is that it taps into truth—kids invent drama. The book is about an ordinary neighborhood drugstore about which the kids are telling tales concerning mysterious things that have gone on there: Maybe there's a dead body in the basement, or a lady who burned her hair on the second floor, and so on. All this made-up stuff and it kind of snowballs. Of course, the tall tales become taller with each telling.

What I love about the book is that it sparked a memory. When I was a kid, there was a house on the corner, a big old Victorian house. And you would either make up stories or hear stories about all the stuff that went on in the house, although I'm sure none of it was true. You build drama because you need it.

This is great little book because it begins with the truth that kids create this drama. Lemony Snicket recognizes this truth and creates a book that everyone can relate to. But the truth is always there—the truth that kids do this—and kids will always be able to relate to it.

Those are a few of the crazy and energetic books on my stack right now. On the other end of the spectrum are the softer books. I like *If You Want to See a Whale* by Julie Fogliano. It's a beautiful book because it observes that if you want to see one beautiful thing, you have to ignore so many other beautiful things. What a great message that is.

The Gift of Nothing by Patrick McDonnell is a benchmark book. A new one that I particularly admire is *The Promise* by Nicola Davies about a woman who is a pickpocket and is redeemed by someone whom she robs. My current favorites, the newer ones, are on the cart next to me.

CK: What kind of relationship do you have with your editors?

Tom: Well, it varies. I have several editors I work with because I get projects from various publishers. I don't have the same kind of relationship with all of my editors, but it's always exciting and friendly. It can be very business-like. We get things done and it's cordial and friendly.

Regarding working with editors, I work a little bit differently than most illustrators because I like to collaborate with the author and the editor. I usually have thoughts about the text that I want to change or actually get in there with the author and rework. As long as the editor and author are open to collaborating, there's probably more back and forth with my books than there might be with other illustrators. Occasionally I get a manuscript that I don't tinker with at all, for example, *Stick and Stone,* which was just released. I got that manuscript and one of the things I loved about it was that it was really worked out, which is such a treat for me. It was tight.

However, there was *one* thing I wanted to do. The book is about a stick and a stone that become friends because one of them gets bullied. I just wanted to bring back the bully at the end and have him apologize, because I didn't like the idea of an antagonistic character being introduced, then dismissed from the story and not be given the opportunity to come back and redeem himself. I'm a big believer in redemption. So I asked the author if I could bring back the bully in the very, very end. It's just a
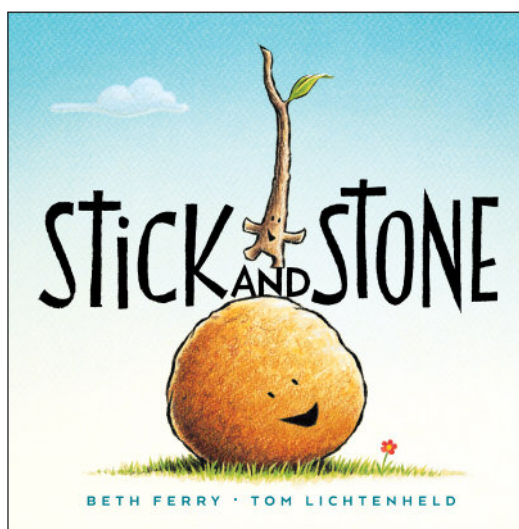
little nod; it's not even in the text—it's in a drawing at the end of the book that you might not even notice. It satisfied my need to redeem the bully and to demonstrate to kids that you can apologize without losing face. And you can accept apologies from people without permitting their behavior to go unnoticed. The author was completely open to it.

The other end of the spectrum is when I work hand-in-hand with an author, which is how I often work with Amy Krouse Rosenthal. The way it works is that one of us has an idea that we're not getting any traction on, and we will call the other and say, "I have this idea. I think there's something there. Want to work with me?" Then we'll sit together for a day and work the whole thing out, and so the book becomes co-owned by both of us, and the line between author and illustrator is almost invisible. Of course, editors have to be on board with that type of collaborative, creative process.

One of my newest books, *I Wish You More,* was an idea that I had about six years ago, but it was incomplete until Amy and the editor made it work. It started when I saw this little girl with her sweater misbuttoned. I looked at her and thought, "Oh, she has more buttons than holes." So I went home and drew a picture of a kid with more buttons than holes. I drew a bunch of other pictures—more *this-than-that* pictures, the way a kid might see it. Like a kid out in the snow with his tongue sticking out with the phrase "More snowflakes than tongue" below the picture. I created a collection of these drawings and they were really charming—but they didn't have a purpose—they were just a collection of word play. So I said to Amy, "I really think there's an idea here. Would you help me turn it into something?" Also collaborating with us was the editor, who came up with the idea of turning it into a series of wishes. The editor said, "What if it's a series of wishes?" And as soon as she said that, it really took the book up about two levels. Immediately we all saw it and it took off from there. It went from merely word play to having an emotional context that it didn't have before. And it happened when the three of us were sitting around at an ALA [American Library Association] conference.

To me that's powerful editing, when the editor sees something that the author and illustrator missed, or contributes a spark of an idea that gives the work new meaning or purpose. That's often the case when you have ideas; you don't recognize the nugget because you invented it. It takes someone else to look in there and say, "Well, there's the nugget of the idea," and show it to you. I also work with editors who are hands-off, like the editor for *Stick and Stone.* By the time I got the manuscript, it was so well put together that it didn't need a lot. I showed her a lot of sketches. She liked everything, and we have a great little book.

**CK: What is your process for writing and illustrating—drawing first, storyboarding?**

Tom: What I do first is doodle. So if I have an idea, I'll immediately do one doodle. For example, a kid once asked me if I thought a snail could go around the world. And I thought "Oh, my goodness! In a nanosecond there's an idea: the snail going around the world." So I have a doodle on my bulletin board of a snail on a leaf. The leaf is kind of dangling way out in a big panoramic scene, and the snail feels his limitations and his possibilities at the same time. He sees this whole big world out there. He's just a snail. I see a lot of potential in that one doodle because we wonder: Is he going to go for it? How's he going to go? Does he go across the ocean? Is he going to end up getting lost? Is he going to end up on someone's plate in Paris? It's just one little drawing, but it is a big idea. And maybe it will become a book someday.

I also have a picture of a clown who's bowling. The name of the story is "Clown's Day Off." The idea is: What would a clown do on his day off? Would a clown want to be really serious on his day off or would he want to be funny? Would he go shopping for new shoes but couldn't buy any because no one has size 100 shoes? So that's how an idea starts. I don't really know what's going to happen with it until I get there and see if there's any more depth to it.

CK: What advice do you have for young writers?

Tom: This sounds cliché, but I would say read a lot and challenge yourself to find writers who you like to read. Reading is the first step of writing.

The challenge with kids and reading is to get them to do it voluntarily, and to do that, you have to find books they're really interested in, either the subject matter or the
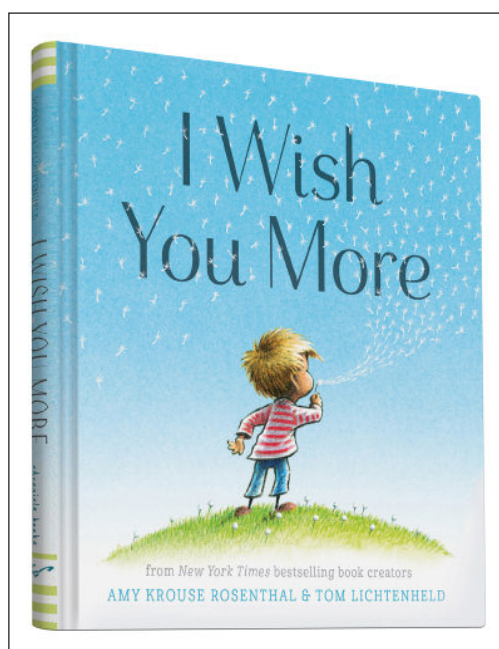
Read a lot and challenge yourself to find writers who you like to read. Reading is the first step of writing.

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Books on Tom Lichtenheld's Shelf

A Penguin Story by Antoinette Portis (New York: HarperCollins, 2008).

Clever Jack Takes the Cake by Candace Fleming (New York: Schwartz & Wade Books, 2010).

God Got a Dog by Cynthia Rylant (San Diego: Beach Lane Books, 2013).

If You Want to See a Whale by Julie Fogliano (New York: Roaring Brook Press, 2013).

Jemmy Button by Jennifer Uman (Dorking: Templar, 2012).

My House by Delphine Durand (Kent, England: Wingedchariot Press, 2007).

Oh, No! by Candace Fleming (New York: Schwartz & Wade, 2012).

The Day I Swapped My Dad for Two Goldfish by Neil Gaiman (New York: HarperCollins, 2004).

The Gift of Nothing by Patrick McDonnell (New York: Little, Brown, 2005).

The Hole by Øyvind Torseter (New York: Enchanted Lion Books, 2013).

The Promise by Nicola Davies (Somerville, MA: Candlewick Press, 2014).

The Scrambled States of America by Laurie Keller (New York: Square Fish, 2002).

29 Myths on the Swinster Pharmacy by Lemony Snicket (San Francisco: McSweeney's McMullens, 2014).

Where Do We Go When We Disappear? by Isabel Minhós Martins (London: Tate Publishing, 2013)

voice of the writer. I think once they find the kinds of books they like, it won't be such a chore.

CK: Were you a big reader as a child?

Tom: Not at all. I was a terrible student. I wasn't a reader. Not until I got to college when I discovered things like Kurt Vonnegut and I started to read books, and it took off from there. As a child, all I wanted to do was draw. I grew up in a factory town, and no one knew what to do with a drawer. Thankfully today, talents like creativity are nurtured and valued.

CK: What or who do you think of when you are writing and illustrating?

Tom: I like to think of a specific person—it's something I learned by accident when creating with my very first book. My nephew who liked pirates asked me to draw him a picture of a pirate, and I ended up drawing him a whole book about pirates. It was all nonsense, but I was just trying to make him laugh. It eventually became my first book, *Everything I Know About Pirates*. I learned that when I'm writing a book, I imagine it's a conversation between me and one other person. I don't care if it sells 50,000 books, it's still a one-on-one conversation. So I just try to think of one person and I've got to keep them engaged.

I've got pictures of kids on my bulletin board, clippings from magazines. Those pictures inspire me to remember how smart kids are—they need something to grab on to, and they need to be stimulated. Mixed with those pictures, I've got a one-word prompt that says "Provoke." It reminds me that I need to provoke thought and curiosity. I need to give kids something to grab on to or to puzzle out.

CK: How much attention do you give to spacing and layout?

Tom: Primarily, it's instinctive. I don't think about layout and spacing consciously, but I do think in terms of the focal point, making sure the book is dynamic from page to page. Because my background is in graphic design and advertising, I'm used to working with a flat piece of paper and trying to make it interesting. When people ask me if I think about the movement of the eye across the page, it's something I know.

Book illustrators who come from film backgrounds, like John Klassen, have an amazing ability to tell a story sequentially and to build the dynamics through their pictures. They don't need a lot words because they're used to working with a series of images.

I do a lot of sketches for every page, every spread. I do them really small and really fast so I won't get caught

up in detail—I work with major shapes when I'm sketching. And then I flush them out, making them tighter and tighter. It's one of the more fun parts of the job. I love taking manuscripts and doing that first pagination into 32 pages, figuring out the pieces as the work unfolds dynamically. I like defying the conventional, like maybe a sentence would be more dramatic if it were broken in the middle from page to page, different from how the manuscript is crafted, and it will be more dramatic when you turn the page, not necessarily going by the way it's written. There might be breaks in the lines of the text where the author is thinking of a page turn, but maybe that's not the right place for a page turn. So I play with that a lot of different ways.

I also study some of my favorite books by actually sketching them out. I did this with Candace Fleming's book *Clever Jack Takes the Cake* because to me, it's a benchmark of a modern fairytale, both in story and illustration. By sketching it out, I was learning what decisions the illustrator made as he was designing the book. There's no better way to learn that than to actually do it. It's the same if you want to become a great painter: you go to the museum and copy a Van Gogh. Your painting would be worthless on the market, but you're doing it to try to learn the painter's process and decision making. So I'll actually sit down and sketch out a book. I'll just do it in black and white, and I'll do it pretty simply. But I'll put it on the wall and I'll study it for a while. That's really helpful.

CK: Who decides on the cover picture, front pages, endpapers, bar code design, and so on? Is the process purposeful and meaningful or mostly decorative?

Tom: Well, I might be different than many illustrators in that, for the most part, I design my own books. I do work with the publishers' designers and art directors, and they are really very talented and helpful. But when I start sketching out a book, I'm actually designing it at the same time.

I love endpapers and usually try to do something interesting with them. The endpapers are a couple of things. First, they're an opportunity to do something more conceptually and visually, and secondly, they're an opportunity to add another facet to the story. For instance, in *Stick and Stone*, I use the endpapers to tell the origin story for Stick and Stone. The endpapers tell where Stick and Stone come from. I like origin stories—they may be the only way we can overlap with our heroes—because we all

I also study some of my favorite books by actually sketching them out.

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come from somewhere. The origin story of Stick and Stone is that Stick is just a stick falling out of a tree, and Stone is just a stone being thrown out of a volcano. There's no narrative connection between that information and the story, but I think it's interesting because it tells you where they came from. So I always try to do something with my endpapers.

One of my favorite books is called *A Penguin Story* by Antoinette Portis. The story is about a penguin who is tired of looking at blue all the time because all the penguin sees is blue constantly. Everybody laughs at her but she goes out and she finds orange. Well, the back endpapers of the book are green. And they're green because the next color she's going to find is green. And its really subtle, but the text suggests it and there it is.

Other great endpapers are in *Oh, No!* by Candace Fleming, illustrated by Eric Rohmann. The endpapers suggest that the story is not really over. The book would not be incomplete if it wasn't there, but having it there extends it. Sometimes I think we authors and illustrators do some things just to amuse ourselves. You've got to make a decision anyway, so why not make it a meaningful one?

CK: Do you have a favorite book that you've published?

Tom: That's a tough question because it's like asking a parent who their favorite child is. Also, I'm like a kid who's got a new toy when I've got a book coming out. Right now *Stick and Stone* is probably my favorite. The text is so sparse, yet so rich. When I sketched out that book, my first sketches were overembellished. I kind of did what I always do—I did a whole bunch of little side gags and visual puns. Then I studied it and realized that although it was funny, it was not appropriate for this story. So I stripped it all down, realizing that I had to be as concise with my pictures as the author was with her words.

CK: What are you most excited about regarding your latest books *I Wish You More* and *Stick and Stone?*

Tom: They came out at the same time, so I'm doing marketing for both. It's a lot of fun. I just learned *I Wish You More* is going to be on the *New York Times* Best Seller List next week. It's very exciting when something is embraced by readers. I'm doing a book tour for it next week, so I'll be traveling around the country. I tell myself that every book I do is an investment in the next book: If I do a good job on this book, they might let me do another one.

CK: What are you working on now?

Tom: Right now, I'm working on something really interesting, but it's not a kid's book; it's a novelty/gift book. The idea came from Amy Krouse Rosenthal who said, "I have this whole book of cow puns and it's really dumb or rather silly. Would you like to do it?" I told her, "Man, I want to do this book so badly. I had just had a huge project blow up on me. I'm going to start drawing it right now in the airport." And I did, literally. I had a sketchbook with me and I started drawing. It's called Holy Cow, I Sure Do Love You, and it's a cow's testament of love to someone and it's full of cow puns. And in fact, Amy limited it, so it's puns on the word *moo*. So it's not puns like "you're utterly wonderful." It's all moo puns, which I like because I'm a big believer that creativity comes out of discipline, not out of a blank canvas. In other words, there's this myth that creative people need all the tools in the world and all the blank paper in the world and they need to do whatever they please, but I don't believe that's true. For instance, when we began working on *Duck! Rabbit!*, Amy and I decided that we were going to do this book with only one drawing—which is a tremendous limitation—but within that limitation we found a lot of richness. So it's more rewarding for the creator and the reader because the reader understands where you are and what world you're in, and then you just see how many surprises
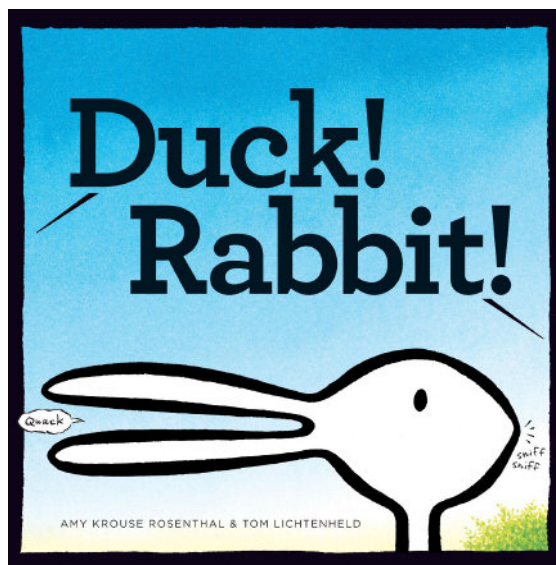
you can discover within a defined space.

I'm also working on a possible series with Scholastic. They asked me to develop a specific character that would be turned into a series. That's fun because I've never done a series with a consistent character. I enjoy character design and thinking about this character living for a long time and taking on different iterations. It's kind of a fun challenge. I like new challenges, challenges that really test my abilities.

* * *

Knowing how Tom perceives his work and his process in designing and illustrating, I definitely approach his books a bit differently now because of my new understanding of the energy and passion behind the purposeful choices on every page. I encourage you to share these nuggets of information with your students as they discover their own literary heroes.

Christine D. Kyser is an assistant professor of educational technology at the University of Northern Colorado. Christine's research interests focus on the integration of technology in the classroom, specifically in the writing workshop. She loves working with preservice, practicing teachers, and doctorate students exploring innovative pedagogy.

Children's Literature Cited and Illustrated by Tom Lichtenheld

Ferry, B. (2015). *Stick and stone*. New York: Houghton Mifflin Harcourt.

Lichtenheld, T. (2003). *Everything I know about pirates*. New York: Simon & Schuster.

Lichtenheld, T. (2007). *What are you so grumpy about?* New York: Little, Brown.

Rosenthal, A.K. (2007). *The OK book*. New York: HarperCollins.

Rosenthal, A.K. (2009). *Duck! Rabbit!* San Francisco: Chronicle Books.

Rosenthal, A.K. (2015). *I wish you more*. San Francisco: Chronicle Books.

Historical Fiction:
Making an Impact in the Classroom

Ryan J. Schaefer

This article explores the most effective ways to teach historical fiction. The author—who not long ago was reluctant to read historical fiction, much less teach it—now shares his passion to include it in the curriculum as well as his strategies for engaging young readers, providing a meaningful and successful experience with this genre.

When it comes to reading historical fiction, I used to pass these books by without giving them a second thought. I'd rather read about Middle Earth, adventures in space, natural disasters, or even which insects and arachnids would love to devour me. But historical fiction? I had no desire to read that genre. Images of dusty tomes and outdated maps flooded my brain. Because of this, when my students asked me about historical fiction books, I had very few positive comments—much less a list of books I could recommend to them. I often tell my students that they should read widely and challenge themselves by reading genres that they are unfamiliar with. It was ironic that I did not practice what I preached when it came to historical fiction.

An assignment that I was given while obtaining my master of education in literacy degree at Judson University (Elgin, Illinois) changed my opinion of historical fiction. I was asked to pick a genre that I was reluctant to read and that I would have difficulty recommending to my students. The assignment required me to read at least 1,000 pages from trade titles written for children or young adults and at least 80 pages from professional sources in that genre. I found myself traveling back in time, reading about survival, death, adventures, and interesting characters. The more historical fiction books I read, the more I learned about history; I realized this could help my students during social studies. As my appreciation and

My students have been exposed to a whole new world of books, and our social studies lessons have been more meaningful and impactful.

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knowledge of historical fiction grew, so did my ability to teach this genre to my students. I could now recommend historical fiction books for my students, and I found myself able to pair historical fiction books with the social studies curriculum that I was teaching. As a result, my students have been exposed to a whole new world of books, and our social studies lessons have been more meaningful and impactful.

What Is Historical Fiction?

Historical fiction is a novel or picturebook set in the past (Saricks, 2009). While informational texts and history books are solely based on facts, historical fiction is unique because it contains fiction and fact (Barone, 2014). A history textbook will tell you what happened on a certain date with a certain person. It is cut and dry and based on facts. Historical fiction books can also inform the reader of past events or people, but they attempt to do it in a much more engaging and meaningful way.

The characters in a historical fiction story for children or young adults are portrayed to have lived within a particular era (Galda, Cullinan, & Sipe, 2011), and the main character is usually an adolescent or child. This is a powerful aspect of the genre, as it allows students to experience the emotions and thoughts of a character that is similar in age.

Benefits of Historical Fiction

Reading historical fiction provides many benefits to students. One of the most powerful and meaningful benefits that historical fiction offers is that it allows students the opportunity to make a connection with another person across the expanse of time. Instead of just learning about facts, places, or events, students become invested in a character (Levstik, 1990; Nawrot, 1996). For example, in the book *Crispin: The Cross of Lead* by Avi (2002), readers follow the story of a young boy named Crispin in 14th century England. As readers delve into the story, they learn about Medieval England, the roles of classes, the dialogue and mannerisms of the time, and much more. What engages students, what makes it hard for them to put the book down, what compels them to learn more about Medieval England are Crispin's struggles and adventures. Crispin is forced to deal with the death of his mother, he is exiled from the only home he has ever known, danger lurks around every corner, he meets strange and dangerous people on his journey, and he is forced to grow and mature along the way. These events make Medieval England interesting and real to readers. When students are learning about the subject in social studies, they now have a person they can conceptualize and connect with. By investing in another human, students will be more likely to learn about the time era.

Another benefit that appeals to students is that historical fiction is fun to read. Authors try to bring the past to life (Saricks, 2009), and often, these stories are entertaining and educational. When learning about the past, students may find themselves reading social studies texts and memorizing fact after fact. If a student is studying history by reading bare facts, it can be dry (Baer, 2012; Krapp, 2005), and students' curiosity and interest in the topic may diminish. Historical fiction solves this problem because it provides students with knowledge of the past through a fun and engaging genre. The text does provide facts about history, but it also connects readers to characters they can empathize with. A random city of the past can now be brought alive by the sights, smells, and sounds that are penned, helping students visualize a setting.

Historical fiction has academic benefits as well. With Common Core State Standards requiring students to think more critically, many educators are searching for meaningful resources that will challenge students while holding

Historical fiction provides students with knowledge of the past through a fun and engaging genre. The text connects readers to characters they can empathize with.

their interest. Historical fiction can aid in teaching critical-thinking skills (Baer, 2012; Nawrot, 1996). Students must not only analyze the plot of the story as they would in any other genre, but also determine what are actual facts from the time era and what is fiction provided by the author. Furthermore, when paired with nonfiction resources, students can gain a greater understanding of historical figures and events. Therefore, by reading historical fiction, students become more literate about history in general (Chick, 2006; Goudvis & Harvey, 2012).

Challenges of Historical Fiction

Historical fiction books also present unique challenges to students. One challenge that may affect a reader's comprehension of historical fiction is the complex vocabulary (Youngs & Serafini, 2011). An impactful historical fiction piece is authentic and uses accurate proper nouns, phrases, and dialogue among characters. While these add to the authenticity of the literature, it can be a barrier for student comprehension. Students are trying to comprehend the story and also determine the meaning of the dialogue between characters (Youngs & Serafini, 2011). For reluctant readers especially, this can be a very frustrating process if they do not have the tools to successfully navigate the complex vocabulary.

Another challenge that students face while reading historical fiction occurs because the genre is a blend of fact and fiction (Barone, 2014). If unequipped with the knowledge and tools of how to differentiate what is fact and what is fiction, students may obtain misconceptions about history. Students may have difficulties understanding that the book they are reading is a piece of fiction (Levstik, 1990), and as such may take everything that occurs in it as fact. Or students may believe that everything occurring to the characters actually happened, not taking into consideration the author's ability to weave in fiction.

Some historical fiction books offer only one side of the story, and teachers need to provide their students with a balanced account of what actually happened (Nawrot, 1996). If students do not think about multiple points of view, misconceptions regarding the historical topic or person can occur. Historical fiction can be challenging because students may lack background knowledge about the topic (Youngs & Serafini, 2011), and therefore have trouble realizing that there may be other perspectives regarding the event or person they are studying.

Teachers can help their students overcome these challenges. To help with vocabulary, frontloading a lesson and examining difficult words before reading, playing vocabulary games, or even having students keep a vocab journal can all alleviate frustrations that may arise while reading. A simple strategy that I've used with my students to help them differentiate fact from fiction is creating a t-chart on butcher block paper. One side of the T is fact, the other fiction, and as we read, my students will tell me what goes where. It is very simple but has proved to be extremely powerful in helping my students' comprehension. Finally, providing texts that offer different points of view on the same topic, modeling think-alouds, and having students come up with and ask critical thinking questions can help facilitate a greater understanding of the historical event.

Historical Fiction Picturebooks

Historical fiction picturebooks provide students with an understanding of what life was like during a specific time period through the use of text and illustration (Goudvis & Harvey, 2012; Youngs & Serafini, 2011; Youngs, 2012). The illustrations of a picturebook allow students to visualize an unknown time or place. The events and people of the past are presented in a fun, exciting, and suspenseful way (Nilsen & Donelson, 2009).

The power of the picturebook as it relates to historical fiction is the flexibility it has to positively impact learning in the classroom. Teachers can use historical fiction picturebooks to help students empathize with characters (Chick, 2006; Rycik & Rosier, 2009; Youngs, 2012), offer a new perspective on a topic (Roser & Keehn 2002), and provide background knowledge to students. "Reading historical fiction provides students with a vicarious experience for places and people they could never know. Often readers are able to see history through a child's point of view and identify with their emotions" (Rycik & Rosier, 2009, p. 163). Historical fiction picturebooks engage readers because they immediately give the students visual images of the characters and setting of a time era or event.

Teaching Historical Fiction

Before Reading

Teaching historical fiction requires more work than just picking up a book, reading it, and putting it back on the shelf. Knowing what to do before students begin reading will make for a more meaningful and successful experience with the text. Preteaching is crucial for students to get the most out of the stories because many students do not have the background knowledge of the time period,

people, or events, and therefore struggle with the story. The more background knowledge they have before reading, the more successful they will be with the text (Johnson & Ebert, 1992; Youngs & Serafini, 2011).

Whether reading a picturebook or a trade novel, spending some time exploring the features can have educational benefits. By examining the cover, title page, dedication page, and author's note, students will be more prepared to comprehend the story (Youngs & Serafini, 2011). In addition, engaging a student's senses can be a powerful way to increase interest and activate background knowledge. Having a visual, such as a map or picture, is very helpful. Touching and actually holding artifacts that represent the time era is another way to help prepare students for the text. I use these tactics with every book I read aloud in my class. My modeling this strategy has led to my students doing it with books they read independently.

An additional strategy that teachers should do is to frontload the pronunciations of proper nouns that are in the text. Many historical fiction books have hard-to-pronounce proper nouns, leading students to become so frustrated that they abandon the book. Taking time before reading to point out how to say these names will greatly ease the stress of the genre. I share with my students words of wisdom from a professor I had: "A book is like a present. Unusual names and places are like fancy wrapping paper and ribbons. If you can get past those names, you will find an amazing gift on the inside." I tell my students that I struggle with proper nouns in a story occasionally, but I do my best to pronounce them and move on. There is a great story waiting for you to discover. Similarly, teaching students how to use a glossary (if one is provided) is imperative. This will allow students to have greater success with the book.

During Reading

One of the most important things teachers can do for their students as they examine the genre of historical fiction is to model the difference between fact and fiction in literature. Providing explicit instruction while examining the text will help students decipher what actually happened and what was added for entertainment value. It is important to provide scaffolding for students so that they can learn about the historical time period (Barone, 2014). Also, teachers should make sure that they prominently display a wide variety of other texts regarding the same topic (Goudvis & Harvey, 2012; Johnson & Ebert, 1992). These can be in the form of picturebooks, chapter books, reference materials, original source materials, or other resources that will aid in the comprehension of the topic. Giving students several books at multiple levels will help

aid in their comprehension of the topic as well as increase their interest. By having a wide range of literature materials, students can continually build their background knowledge regarding the topic they are studying.

Teachers should ask questions for different purposes while reading (Goudvis & Harvey, 2012). These questions can range from basic knowledge questions to inferential questions to more complex critical-thinking questions. Asking, "What did you notice?" is an effective way to have the students begin to think critically (Youngs & Serafini, 2011). I have fun with this in my classroom. I always will say—in a dramatic voice—"And now…I will ask the most dangerous questions a teacher can ask their students…because they never know what answer will come out. What do you notice?" My students get a kick out of it and the engagement level is always high. By answering questions, students will begin to think critically about the time period and topic. Upon completion of the book, students will gain a frame of reference that they could draw on to help them further their studies. Keeping these questions in a journal and reflecting on them can lead to critical thinking and engaging discussions. In addition, students can evaluate the author's purpose and the perspectives of different characters in the story (Goudvis & Harvey, 2012). Students will be exposed to a meaningful, rich experience by examining the author's purpose and analyzing multiple perspectives.

Additionally, historical fiction picturebooks can be paired with more complex readings such as novels or nonfiction texts. Reading a picturebook, based on the same topic, before reading a novel or nonfiction text will not only help build students' background knowledge but will also increase their interest in the topic.

After Reading

To engage students in critical thinking, teachers should continue the lesson even after completing a historical fiction book by asking questions about the text. This will extend students' learning. I found this to be extremely helpful and insightful with my fifth graders. When answering these questions, there would inevitably be the "Oh, now I get it!" exclamation from a few of my students. I attributed this to the fact that many times the book we were reading was the first exposure to a topic that my students had ever seen. Youngs and Serafini (2011) examine what types of questions to ask during or after reading the text:

The power of historical fiction writing is when it educates readers about past events in a fun and exciting way.

- Whose view of history is being presented in the book?
- How are historical characters portrayed?
- What systems of power and social issues are being challenged?
- Whose view is privileged in the telling of the story?
- What has been left out of the story?
- How do the images presented affect the readers' interpretations? (p. 8)

Students may have discussions with classmates, teachers, or even keep track of their thoughts in writing journals. Students need time to respond to what they read (Nawrot, 1996). This will allow them to process the story and ask further questions about the topic. We kept track of our thoughts in our writing journal. My students seemed to really enjoy this because it allowed them the freedom to write down revelations that came to them at any moment. You know you are doing something right when a student pulls out their writing journal during a math lesson, gives you a thumbs-up, and writes down a question or thought that popped into their head. This became a frequent occurrence in our class and made the discussions and dialogues regarding our historical fiction reading absolutely phenomenal.

Projects are another excellent way to deepen understanding of historical events. Nawrot (1996) provides ideas of what to do after reading a historical fiction piece:

- Prepare a factual report on historical people or events.
- Write a sequel to the story.
- Retell the story from another character's point of view.
- Write newspaper articles about events in the story.
- Write letters or diary entries that one of the characters could have written. (p. 3)

Selecting Historical Fiction Books for Your Classroom

How do teachers select impactful historical fiction? How do teachers know which books will engage their students and help facilitate learning in the most meaningful way possible? First, historical fiction needs to accurately portray the characters, setting, and plot of the time era (Barone, 2014; Galda et al., 2011; Nilsen & Donelson, 2009; Saricks 2009). Whether for enjoyment or to pair

Table 1. My Favorite Resources to Research Historical Fiction Books		
Name	Description	Website
Association for Library Service to Children	A division of the American Library Association, this website contains lists and descriptions of award-winning books as well as resources for educators.	www.ala.org/alsc
Booklist Online	The online version of this publication provides many helpful and intriguing booklists, articles, and resources for teachers.	www.booklistonline.com
Bookworm For Kids	This website provides reviews and age ranges for books for kids. Categories are arranged by genre, author, theme, age, season, and more.	www.bookworm4kids.com
Goodreads	Goodreads allows users to read book reviews, follow their friends and favorite authors, form and join reading groups, and create a book list.	www.goodreads.com
Literature for Kids	Created by reading specialist and author Laura Duggan, this website provides descriptions, identifies themes, and gives age recommendations for books.	litkidz.com/books/historical-fiction

with curriculum, historical fiction books that are accurate will help students gain a greater understanding of the time period about which they are written.

Second, the story should be entertaining. The power of historical fiction writing is when it educates readers about past events in a fun and exciting way. Paired with nonfiction pieces, students can gain a tremendous understanding of historical events and people of the past. An engaging historical fiction novel should be hard to put down. Powerful historical fiction helps students become better readers, enjoy an amazing story, and learn about the past. "The best writers in this genre deftly blend history and story together, seamlessly melding the two without placing large sections of 'history' in the midst of the plot" (Saricks, 2009, p. 293).

Table 1 is a list of my favorite resources for researching historical fiction books for my students. I use these when trying to find the right book for the right student. These resources are great not only for finding historical fiction, but also for finding terrific books in other genres as well. When selecting high-quality historical fiction books for my students, here are some questions I ask myself. If the answer is yes to the majority of these questions, I know I have an exceptional book for my students.

- Will my students enjoy reading this book?
- Will this book cause my students to generate questions?
- Will my students experience strong emotions while reading this book?
- Does this book enhance my curriculum?
- Did the author and/or illustrator accurately portray the time period?
- By reading this book, will my students be more likely to develop civic efficacy?

Application to the Classroom

After reading and learning about best practices regarding historical fiction, I was interested to see how I could apply this knowledge to my own classroom. I decided to gauge my students' interest levels and knowledge regarding historical fiction. I gave my fifth-grade students a survey in November asking them to identify their three favorite genres, to name their three least favorite genres, and to list three historical fiction books. I was shocked to find out that 0 of my 27 students identified historical fiction as a top-three-favorite genre. In addition to not appreciating the genre, the majority of my students couldn't even name three historical fiction books. While conferring, I asked some of my students why they didn't read historical fiction books. I was met with a lot of shoulder shrugs and responses of "it's boring." This wasn't terribly surprising, because I held this same attitude only a few months ago. I knew that I had to do something, however, as my students were missing out on a great genre.

To expose my students to quality historical fiction, I decided to have my next read-aloud book be a historical fiction text. I selected 2003 Newbery Medal winner *Crispin: The Cross of Lead*, by Avi (2002). I created a book trailer (https://animoto.com/play/j3HNNnYYXdQtLtQpR1H0Qg) and showed it to the class. I then asked them, "How do

you think Crispin feels when he is declared a Wolf's Head? What would you do if you were in Crispin's situation?" This was met by awkward silence and confused looks. I knew that my students had no idea, but I was building up the drama, getting ready to reveal for them the shocking truth of the situation in which Crispin finds himself. Finally, one brave soul raised their hand and asked what a Wolf's Head was. "Oh," I said, "You don't know? It's when the ruler of the land says that anyone can kill you…and they will be rewarded for completing the task." The classroom exploded with shocked shrieks, questions, and most importantly, strong opinions. I knew I had my students hooked.

For the read-aloud, I read one or two chapters each day to my students. As I read, I would selectively stop and engage my students. I would ask, "What are the differences between the way Crispin lives and how you live today?" The responses were great. Students were genuinely shocked at how children lived and were treated during Medieval England. I was told many times, "Mr. Schaefer, I can't imagine living back then. It seems crazy." While the students said they had a hard time imagining life in Medieval England, I noticed that they were comprehending the story and beginning to develop background knowledge on a previously unknown topic. We also created t-charts, Venn diagrams, and other graphic organizers that listed the differences and similarities between Crispin and modern children. Students also had discussions with classmates regarding their emotional reactions to how Crispin was being treated when he was being hunted by his former villagers and landlord and what they would have done in his situation. Over the course of our read-aloud, my students started to care about Crispin. What was fascinating to watch as a teacher was how their compassion for Crispin led them to take an interest in Medieval England. The power of historical fiction had been awakened!

Suddenly, a topic my students knew nothing about, feudalism, became a lightning rod of discussion. It evoked emotions within them. They were shocked, furious, and appalled at how the lower class was treated. When I would finish a chapter, my students would beg me to continue reading—every teacher's dream scenario—and it was obvious that they were really enjoying the story. Four of my students went to the public library, checked out their own copy, and followed along as I conducted my read-aloud. Reading this novel was extremely enjoyable for me as well.

By being up front and transparent about my growth as a reader, my students were fascinated to read the books that transformed their teacher.

One moment in particular stands out in my mind. When Avi reveals who Crispin's father is, I had chills because of my students' reactions: some of my students were screaming in shock, some were silent with their jaws hanging open, and others were nodding with a huge smile because they had figured out the plot twist earlier.

In addition to *Crispin*, I also started to include at least one historical fiction book with my weekly book talks. I was brutally honest with my students and let them know that I didn't love historical fiction last year. I mentioned to them that I thought these books were boring and would rather read a fantasy or science fiction book. "But these books," I said, "changed all that. These books completely changed my opinion of the genre and made me fall in love with historical fiction." By being up front and transparent about my growth as a reader, my students were fascinated to read the books that transformed their teacher. During the book talks, I focused on details about the characters in the story, the time era of the setting, and the conflicts that the characters faced. I only shared books that I had read and that I believed would be appropriate for my fifth-grade students. I started to notice that they would gravitate toward these books and recommend them to friends once they finished reading them. Some of my students' favorites included *Al Capone Does My Shirts* (Choldenko, 2004); *Fever 1793* (Anderson, 2000); *A Long Walk to Water* (Park, 2010); *Henry's Freedom Box* (Levine & Nelson, 2007); *Nory Ryan's Song* (Giff, 2000); and the I Survived series by Lauren Tarshis.

When I gave my initial survey in November, not one student had listed historical fiction as a top-three-favorite genre. In February, after reading *Crispin: The Cross of Lead* and being exposed to other high-quality historical fiction books, I was amazed to see that the majority of my students listed historical fiction as a top-three genre. The perspective of this genre in my class has definitely changed, and exposing my students to high-quality historical fiction positively influenced their attitude to the genre.

Curricular Connections

The most surprising revelation I've had on this journey is that I will never teach social studies the same way again. It sounds simple, but reading a historical fiction text that is related to the social studies unit being taught will increase students' knowledge. When my students read a historical fiction novel by itself, they learned about the

topic. When that novel was paired with the unit I was teaching in social studies, their knowledge and interest in the topic seemed to grow exponentially. Interestingly, my students developed an emotional connection with the characters in the historical fiction texts they were reading, and this connection increased their motivation to learn.

In all honesty, the amount of preparation work that I need to do before a social studies lesson has increased. Why? Because I'm constantly hunting—hunting for high-quality historical fiction books that will bring history alive for my students. Fifth-grade students in my district study the American Revolution and the Civil War. For both of these units I have found myself talking to the school librarian, visiting my public library, and exploring the resources in Table 1. I am constantly trying to find picturebooks and trade novels that will be meaningful to my students and help deepen their understanding of the topics I am teaching.

While this can be a time-consuming process, finding a historical fiction book related to the curriculum has profoundly impacted my students. Reading historical fiction novels or picturebooks makes the content of the curriculum easier to understand. In addition, this exposes students to a genre that can help them appreciate history. Historical fiction is an incredibly powerful genre, and when paired with academic materials, students enjoy and comprehend the events of history with a greater appreciation and understanding.

Conclusion

A year ago I never would have imagined what a difference one genre could make in my classroom. Researching the genre has helped me not only identify high-quality historical fiction books, but also understand the best way to teach content before, during, and after a lesson. Furthermore, I have started to incorporate historical fiction books into my social studies lessons—something that has made the content much more exciting and easier to understand for my students. I will never teach another social studies unit again without having a pile of related historical fiction books available for my students.

What has been really amazing is how much my students have enjoyed this genre. Many of them have told me that the historical fiction books we read have been their all-time favorites! It took a leap of faith for me to find out more about this genre and start to share titles with my students, but the impression that it has had on them has been absolutely fantastic. I truly believe that all educators—from primary to high school—could benefit from including more historical fiction in their classrooms.

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References

Baer, A. (2012). Pairing books for learning: The union of informational and fiction. *The History Teacher, 45*(2), 283–296.

Barone, D. (2014). Historical fiction: How hard could it be to understand? *Colorado Reading Journal, 25,* 44–49.

Chick, K. (2006). Fostering student collaboration through the use of historical fiction picturebooks. *Social Studies, 97*(4), 152–157.

Galda, L., Cullinan, B.E., & Sipe, L.R. (2011). *Literature and the child* (7th ed.). Belmont, CA: Wadsworth Publishing.

Goudvis, A., & Harvey, S. (2012, March). Teaching for historical literacy. *Educational Leadership, 69*(6), 52–57.

Johnson, N., & Ebert, J. (1992). Time travel is possible: Historical fiction and biography—Passport to the past. *The Reading Teacher, 45*(7), 488–495.

Krapp, J.V. (2005). Historical fiction. *School Library Monthly, 21*(6), 42–46.

Levstik, S. (1990). Research directions: Mediating content through literary texts. *Language Arts, 67*(8), 848–853.

Nawrot, K. (1996). Making connections with historical fiction. *The Clearing House: A Journal of Educational Strategies, Issues, and Ideas, 69*(6), 343–350. doi: 10.1080/00098655.1996.10114336

Nilsen, A., & Donelson, K. (2009). *Literature for today's young adults* (8th ed.). Boston: Pearson.

Roser, N., & Keehn, S. (2002). Fostering thought, talk, and inquiry: Linking literature and social studies. *The Reading Teacher, 55*(5), 416–426.

Rycik, M.T., & Rosier, B. (2009). The return of historical fiction. *The Reading Teacher, 63*(2), 163–166.

Saricks, J.G. (2009). *The readers' advisory guide to genre fiction* (2nd ed.). Chicago: American Library Association.

Youngs, S. (2012). Understanding history through the visual images in historical fiction. *Language Arts, 89*(6), 378–394.

Youngs, S., & Serafini, F. (2011). Comprehension strategies for reading historical fiction picturebooks. *The Reading Teacher, 65*(2), 115–124. doi:10.1002/TRTR.01014

Children's Literature Cited

Avi. (2002). *Crispin: The cross of lead.* New York: Disney-Hyperion.

Anderson, L.H. (2000). *Fever 1793.* New York: Simon & Schuster Books for Young Readers.

Choldenko, G. (2004). *Al Capone does my shirts.* New York: G.P. Putnam's Sons.

Giff, P.R. (2000). *Nory Ryan's song.* New York: Delacorte Press.

Levine, E., & Nelson, K. (2007). *Henry's freedom box.* New York: Scholastic Press.

Park, L.S. (2010). *A long walk to water.* Boston: Clarion Books.

Tarshis, L. (2010–2015). I Survived (series). New York: Scholastic Press.

Augmented Reality Apps in Teaching and Learning

Mia Kim Williams

With summer break soon to arrive, these apps will whet your appetite for new ways to engage students when the new school year begins.

What Is Augmented Reality?

Augmented reality (AR) applications, or apps, offer a way to overlay digital content on tangible objects, images, and locations. By common definition, *augmented reality* is a direct or indirect view of an authentic environment or tangible object that includes a digital overlay that augments or enhances the view of the environment. The digital overlay could be any medium, including audio, video, animation, graphic, photo image, or GPS (Global Positioning System) data. When a mobile device views a trigger in the authentic environment, the digital content comes to life. A trigger could be any tangible object or image that is unique and simple enough to prompt the mobile app to access the digital content.

Imagine video book reviews that pop to life as a student hovers an iPad over the cover of a book; parents stopping in the hallway during parent night to read the students' stories posted on the bulletin board and realizing that if they view them through their phone, they can also hear the students reflecting on their process and learning; or students driving three-dimensional (3D) National Aeronautics and Space Administration (NASA) robotic explorers as they navigate printed images of planetary landscapes around the science classroom. The combinations of digital content and authentic triggers are infinite.

Many AR apps for mobile devices exist in your favorite app stores that provide access to professionally created content appropriate for academic application. These typically require a different app for different content: one app for coding a robot, another app to have digital content explode off the pages of a picturebook, and so forth. In this article, I discuss several AR apps that are popular because of their K–12 academic relevance. A few applications are also available that allow the user to create his or her own AR. For the advanced user, computer-based software can create AR apps (Wikitude); however, there are also several web-based and/or mobile apps such as Aurasma, Blippbuilder, or Layar Creator that allow the user to combine digital content (downloaded or created) and tangible objects in authentic environments.

Most AR apps require access to the mobile devices' camera to be able to use the surrounded setting for interactions. Aurasma also requires wi-fi access to store and retrieve the created AR content.

How Do You Create an Augmented Reality?

Although you can check out numerous YouTube videos explaining the details of how to create AR with your preferred app, I want to cover the process in broad strokes.

Step 1: Create a digital overlay.

A digital overlay is the digital content that will pop up or come to life when the AR is initiated through the app. It could be any kind of medium that provides information to the user. For example, if students were creating book reviews, the digital overlay could be something complex such as an iMovie students created as a project or something simple like a quick video of the student talking captured by the device's camera. If students (or the teacher) were creating an interactive poster or composition, the digital overlay might be an image, an audio file, a map, a video, or something similar. The media can be created by the person building the AR or something that was downloaded from the Internet (appropriately abiding by fair use and Creative Commons limitations, of course).

Step 2: Load the digital overlay into the application.

In order for the digital overlay to be accessible for step 3, it needs to be loaded into the device on which the student or teacher will create the AR. The best way to do this is to create the digital overlay on the device. However, if you need to transfer from a computer to the mobile device, you can use a cloud-based storage option like Dropbox, or maybe use your school's server space if it is set up for this capability.

Step 3: Select an authentic trigger and combine it with the overlay.

Open the AR app you plan to use to create the AR. There are normally some very easy-to-follow steps in the app to select the digital overlay you want to combine with the trigger (in Aurasma, for example, you click on the digital overlay of your choice and upload it). Once selected, you access the device's camera to view the selected trigger through the app, and then snap a photo of it. As an example for the book reviews, the trigger might be the cover of the book or an image of the book that the student created. In the composition, the triggers might be embedded icons in the text of a digital or hard-copy document. In this case, each would need to be created as a separate AR with a digital overlay and a unique trigger.

Step 4: Publish your AR.

Publishing is another quick step, normally found within the AR app. You often need to decide whether you want to publish it as a stand-alone private AR that can be accessed with only the device you created it on; as a stand-alone public AR, which can then be accessed by anyone; or create a channel. A channel is a collection of AR that you combine under a common name. If you had numerous book reviews, you might call the channel Williams' third-grade book reviews. Then each book review AR could be connected to the same channel. This would allow students, parents, or others access to all the book reviews by following the channel through the app on their own devices. Channels can be made public or private, but they offer the convenience of having a collection of AR in one place.

Computer-Based AR Creation Software

Below are descriptions of software that can be found online for creating AR.

Wikitude (free trial)
www.wikitude.com

Teachers or students can build their own AR app by using this software. This is an all-in-one software development kit including vision-based as well as location-based AR that can be used on the following platforms: Android, iOS, smartphone, tablet, Smart Glasses, PhoneGap, Titanium, and Xamarin. It's easy to use, and users can publish their AR content to the Wikitude app.

Junaio Developer
http://dev.junaio.com

Junaio Developer provides an online space to create AR that teachers and students can then view through the Junaio app. This particular tool uses QR (Quick Response) code triggers and is a bit complicated to use. However, it is possible to release the AR scenario as a channel in Junaio. It provides a testing phase where only the creator can see everything; this is a great opportunity to make sure it works the way you want it to before using it with learners. It's free to create and publish, but it is reviewed before becoming public (but it's a fast turnaround).

Layar Creator
https://www.layar.com

Layar Creator is an easy-to-use free online platform. It allows the user to use an easy drag-and-drop format with button and content templates to create AR. The free account only allows you to publish content with ads, and video overlays require a URL.

Create Your Own Reality With One of These Mobile AR Apps

Aurasma (Free)

Apple iTunes: https://itunes.apple.com/us/app/aurasma/id432526396?mt=8

Google Play: https://play.google.com/store/apps/details?id=com.aurasma.aurasma&hl=en

This app provides a new way to see and interact with the world by bringing tagged images, objects, and even physical locations to life with interactive digital content, such as video, animations, and 3D scenes. Aurasma is the only app that lets users create and share their own AR (without web-based software). Users can create private or public channels for sharing their AR. Aurasma is easy to use, so any age student can augment objects in their learning environment.

Spacecraft 3D (Free)

Apple iTunes: https://itunes.apple.com/us/app/spacecraft-3d/id541089908?mt=8

Google Play: https://play.google.com/store/apps/details?id=gov.nasa.jpl.spacecraft3D

From the Jet Propulsion Laboratory, Spacecraft 3D lets users interact with NASA's spacecraft that are used to explore our solar system. Students use a physical AR trigger to get up close with the robotic explorers. Students can study Earth and observe the universe as well as learn about the engineering feats used to expand our knowledge and understanding of space.

Sky Map (Free)

Google Play: https://play.google.com/store/apps/details?id=com.google.android.stardroid&hl=en

You don't need to visit your school in the dark to check out the stars. Users only need to hold their smartphones up in the direction of the sky to receive automatic identification of stars and constellations. This app can be used to identify the stars and constellations using the smartphone camera and works with the existing location of the device. It automatically identifies celestial elements (planets, stars, satellites) that appear in view of the camera lens.

3D Compass Plus (Free)

Google Play: https://play.google.com/store/apps/details?id=com.a0soft.gphone.aCompassPlus

This compass app offers an AR view and real-time map update including location information. Users can incorporate media such as recording video and taking screenshots; it also has a zoom in/out reality view.

FETCH! Lunch Rush (Free)

Apple iTunes: https://itunes.apple.com/us/app/fetch!-lunch-rush/id469089331?mt=8

This is the first AR app for education released by PBS Kids TV series, *Fetch!* Focusing on mathematics skills, Fetch! applies addition and subtraction by using real-world scenarios, which allow for visualization while solving math problems.

ZooBurst (free)

Apple iTunes: https://itunes.apple.com/us/app/zooburst/id531117081?mt=8

This app is great for elementary level students to learn through visual imaging. With this app, students get to interact and become a part of the story. It is a digital storytelling tool that engages the users by the AR 3D characters in pop-up books in the ZooBurst Gallery.

Pete the Cat: School Jam ($0.99)

Google Play: https://play.google.com/store/apps/details?id=com.SienaEntertainment.PeteFinal&hl=en

Apple iTunes: https://itunes.apple.com/us/app/pete-the-cat-school-jam/id520299922?mt=8

Pete the Cat can be enjoyed in a new way with this app. Find hidden objects as Pete travels through his school looking for his guitar. The objects are dynamic, changing each time you visit. There is also a School Jam game and Free Play mode.

Science AR (Free)

Apple iTunes: https://itunes.apple.com/us/app/science-ar/id587192926?mt=8

Science AR is the augmented reality app that makes science posters come alive with digital content. Using the posters as triggers, the depth of content shared through the AR is significant, including videos, 3D models, and scientific diagrams. Contact Paul Hamilton about downloading free Science AR posters at http://appsbypaulhamilton.com.

AR Liver ($1.99)

Apple iTunes: https://itunes.apple.com/us/app/
ar-liver-viewer/id567523780?ls=1&mt=8

AR Liver is a real-time 3D medical tool featuring incredibly detailed anatomical models. It is a member of a series of apps developed specifically for the current iPads by a team of anatomists, certified medical illustrators, animators, and programmers using actual human CT (computed tomography) imaging data. AR Liver is appropriate for use by secondary students, undergraduate and graduate students, and medical professionals. Users need to download the graphic triggers to initiate the AR. This app also has a ton of features and added tools. Because of the image resolution, this app only works on newer devices.

Anatomy 4D (Free)

Apple iTunes: https://itunes.apple.com/us/app/
anatomy-4d/id555741707?mt=8
Google Play: https://play.google.com/store/apps/
details?id=com.daqri.d4DAnatomy&hl=en

Through this free app and a simple printed image, Anatomy 4D transports students and teachers into an interactive 4D experience of human anatomy. Visually stunning and completely interactive, Anatomy 4D uses AR to provide journeys inside the human body to engage in the spatial relationship of the body systems. It's easy to use and provides a strong learning environment that is ideal for use in the classroom.

Augmented Reality Freedom Stories (Free)

Apple iTunes: https://itunes.apple.com/us/app/
augmented-reality-freedom/id616766825?mt=8

This app uses associated cards as the trigger, springing the intricate AR Freedom Stories to life. Augmented Reality Freedom Stories highlights seldom told African Canadian histories from the era of the Canada/US Underground Railroad including Harriet Tubman's efforts to bring American slaves to freedom in Canada. The app content utilizes primary and secondary documents and provides a unique historical experience.

INSTAMOTION-AR (Free)

Apple iTunes: https://itunes.apple.com/us/app/
instamotion-ar/id766613864?mt=8
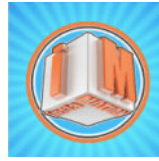
instaMOTION-AR is the first app to use AR on everyday stationery and paper products such as notebooks, folders, journals, Valentine's Day greeting cards, and more. The app allows users to make their stationery products come to life.

Life of a Monarch Butterfly (Free)

Apple iTunes: https://itunes.apple.com/us/app/
life-of-a-monarch-butterfly/id663140722?mt=8

This app is an interactive application for teaching the life cycle of a butterfly. Students can work individually, in groups, or as a whole class. The app is very easy to use and walks the learner through lessons that include video, AR features, and hands-on activities.

Mia Kim Williams, PhD, *is an associate professor of curriculum studies and technology at the University of Northern Colorado. Her research interests focus on critical and innovative pedagogy to support student innovation and development of creativity, communication, critical thinking, and community engagement. Mia works with practicing and preservice teachers and doctoral students interested in promoting innovation in PK–12 environments and is coordinator of an education doctoral program focused on innovation and education reform. Her current projects include learners' development of multimodal design and digital literacies to promote student voice, and advocacy using mobile devices and innovative pedagogy to establish visionary PK–12 STEM-infused classrooms.*

Read, Sketch, Review, and Rate:
Counting by 7s

KIMBERLI BONTEMPO AND ALLIE KAISER

During the fall of 2014, Allie Kaiser, a student teacher from the University of Northern Colorado working at a Poudre School District elementary school, wanted to form a literature study group of fifth-grade readers who would spend time reading and discussing books. The book they chose was *Counting by 7s* written by Holly Goldberg Sloan (2014) and published by Puffin Books. It had been nominated for the Colorado Children's Choice Book Awards. While this book brought up tough issues and sad realities, it also led to deep and critical discussions about life, love, family, friendships, and loss.

Allie had the students read, review, and rate the book, and the group chose the number 7 as their rating symbol. Allie's time as a student teacher came to an end before her students were able to finish their sketches and reviews, but fortunately the kids were still willing to discuss their thoughts with me, Kimberli Bontempo, as I returned to their class to give them a little extra time to finish up their sketches. As I interviewed four readers, I was impressed with how thoughtful, insightful, and inspiring their responses were. The students loved the opportunity to have their thoughts recorded as they reflected on their reading experiences. This discussion took them to a deeper level than a simple bubble sheet would permit.

* * *

Eduardo is an English as a Second Language student who shared with me that he could speak two languages.

Kim: What did you like about the book, *Counting by 7s*?

Eduardo: *Counting by 7s* is one of the best books I've ever read. I like that it was not like any other book. Like, other books are different, but in this one she is always happy even though something bad happens. Her friends always bring her back up, and I also like that you might think something is going to happen in the book, but it is the complete opposite. It was not predictable at all.

Kim: Tell me about the sketch you are making for the cover.

Eduardo: It is a willow tree because she had willow trees in her backyard, and every branch represented a word for the book concepts. Like, there is a branch and it is for *faith*, the other says *hope*, the other one said *friend*, another said *sadness*, the other one said *happiness*, and then the last said *family*. In the middle of the tree, I'm going to put, "Counting by 7s"

Kim: Is there anything that you'd like to tell someone who is considering reading this book?

Eduardo: Boys might not like this book. Well, I mean I thought this was going to be a really girly book, but then when I was reading it, I really liked it.

Kim: So are you saying, "Don't judge a book by its cover?"

Eduardo: (laughing) Yeah, that is what I'm saying, that and maybe the first few pages.

7 7 7 7 7

Eduardo gave this book 6 out of 7 7s

Ryan was quick to admit her own perceived shortcomings.

Kim: What surprised you about this book?

Ryan: I was surprised that Willow's parents died so suddenly—like, Bam!—just out of nowhere. It was amazing how I felt sad that she was adopted, so she already didn't have her real parents and then she lost her adopted parents. That was surprising. It was sad, but another surprise was that there was also a silver lining. Even in all the sadness, there was something good. For example, a plant grew and was successful for the first time when it had never grown before.

Kim: How are you and the main character Willow similar?

Ryan: Umm, probably when she smashed the bottles and put them on the skylight as a decoration. I have something in my room that reflects the sunlight like the glass did. It is similar that we both like shiny things. That is the only way that we are similar, because she is a genius and I have trouble in some academic areas. For writing and reading, I am fine, but for math I have a lot of trouble. That is the total opposite for her. She is a genius in math, which is part of the reason why the title is the way it is. I liked that she was so good at math and that she was so smart. It felt like she was my friend, and I liked that I had a friend that was so good at math.

Kim: I notice you have a book fair at your school today. Would you recommend that someone buy this book?

Ryan: I would say that this is a sad book, so if you don't like sad books, don't get it, but I also think that there is something powerful about it having a silver lining. Even the smallest things make Willow so happy in the midst of all the things she is going through, so I think I would say, "Yes, you should buy it." In fact, that is another connection, because I did actually buy the book at the book fair on Tuesday. Reading together in a group is a good idea. What we did was that when a sad part was coming, we could pick it out and then our teacher would tell us to go home and read it. I think she knew it was a sad part and the sad parts can sometimes be the confusing parts and it was hard to process that on your own, so we'd come back and read it again as a group and talk about it. When I read it at my home first, I wasn't embarrassed to cry. I think that helped a lot to read it twice. I think the next time I read it, now that I own it, it will be even better because I can go deeper and deeper.

Ryan gave this book 5 out of 7 7s

Mena said the least when she was with her peers, but the most when she was with me during the interview.

Mena: I think this book is very sweet and has a great meaning. It tells us to stay positive no matter what the world throws at you. Willow is a great role model and everyone can find a way to admire her. I love the surprise ending—no one will see it coming.

Kim: Did the author do anything that surprised you in this story?

Mena: A surprise was how early she lost her parents. It was in the first 10 pages and you didn't really get to even know them very well. I guess that was good that you didn't get to know them that well. I was thinking if it is this bad already, what will come next?

Kim: Lots of what we read in our school books is pretty positive. What did you think about when this book began so differently?

Mena: I thought it was much sadder than the other ones. I wondered if it would be happy like the ones that are usually chosen for us to read. I felt like my teacher must have trusted that we could handle the topic in the book.

Kim: Did a beginning like this make you want to keep reading?

Mena: I was excited about it and wanted to keep reading. It shocked me enough to kinda hook me. I like mystery books, and it took a while to figure out what happened and to piece it together. The idea that it was so different was interesting. Some stories all feel the same in some of our books.

Kim: What books do you normally choose on your own?

Mena: I usually choose books like this one. I especially like mysteries. My favorite part of this book was when Willow comes to meet the people who help her. I like how she made friends with them. They seemed so different from what you would expect in the ways they talked and lived. They were different like her. It is good that she did meet

them because the story wouldn't have worked out the same if she didn't. I liked the mom's character. She knew how to get things done and she was the one who made things happen for Willow. Dell Duke had some challenges; he might have given up on Willow.

Kim: What would you tell a teacher about teaching this book?

Mena: I'd tell them to be prepared because it is sad on a level that we aren't use to, but we can handle it and it teaches us to stay positive, no matter what happens. I think most fifth graders could handle this book.

Kim: I can tell that you are a very thoughtful fifth grader. What kind of support do you think students who aren't as accustomed to reflecting on their reading and their emotions would need?

Mena: They will need to definitely take things one step at a time. They need to piece together all the things that are happening. This kind of book is complex and kids will need time to read it, not rush through it. I read slowly so I can understand what is happening. I think it would be great to go back and re-read so that I could pick out the tiny details that I didn't catch the first time.

7 7 7 7 7

Mena gave this book 6 out of 7 7s

Maddison just moved to the district from out of the country.

Kim: When we talk about *Counting by 7s*, what first comes to your mind?

Maddison: It is a depressing book in some ways, but when you slow down, there is so much more to this book.

Kim: How do you think this book seemed realistic?

Maddison: In some ways it was realistic. Yes, I could really see that happening, but when bad things kept happening one thing after another and another, it was like maybe too

fictional. I think this book is a good resource to go to because there is time to have loss in your life and you need to learn how to push through those things, and sometimes you might need to have a counselor like she did, even though she didn't want to. Books like this can be examples to people that are having hard times. A book is like a counselor that you can keep in your pocket.

Kim: Is there anything you would have changed about your reading experience?

Maddison: Well, this book was hard for me, and at first I wasn't sure that I wanted to read through it, but I learned so much from it. I am not a big fan of loss. I lost my dog in January, and I had him for a long time. I really liked the ending of the book. It showed that you might have some bad things happening in your life, but there are happy things that will be a part of living, too.

Kim: Tell me about your sketch.

Maddison: I made a number seven and split it into different sections. I didn't just want to make one picture because the book was about much more than just one thing. I tried to convey all the different important topics. So, one more thing—when you read it, you might want to read out loud so that you can understand all the things that are happening. Also, you probably will cry. I got to know the characters and it just happens to me and I can't stop the crying. So bring tissues. If you don't cry, you can use your tissues for a bookmark.

Maddison gave this book 6 out of 7 7s

What struck me most during the interviews was the ability of these fifth-grade students to express their understanding about life, including loss and hardship, but they were quick to point out that being in a supportive group, seeing a character work things out in a positive way, and being reminded of life's silver lining had left a lasting impact on them. It made me consider the books we choose for our classes and it made me wonder if sometimes they are too positive because we see ourselves as the guardians of our students' feelings and of their innocence. In our intermediate grades, by only choosing the books that barely skim the surface of life issues, are we effectively diminishing the power that comes from books brave enough to broach the topics that could potentially help our students learn hard lessons about how to work through their troubles?

Kimberli Bontempo *is currently a PhD candidate in educational psychology at the University of Northern Colorado, but taught primary grades in Poudre School District for many years. Her love of reading, working with children and college students, and exploring motivation theories keeps her happy and busy.*

Allie Kaiser *graduated from the University of Northern Colorado in December of 2014. She earned her bachelor's degree in elementary education with an emphasis in language arts and a minor in reading. She was born and raised in Colorado Springs and currently lives in Fort Collins. She loves to stay active and spend time outside. Allie's passion for literacy influences all aspects of her teaching, and she works to inspire a love of reading in all of her students.*

The *Colorado Reading Journal* editors extend the invitation to other Colorado classrooms to submit their own Read, Sketch, Review, and Rate commentaries. Please feel free to enhance/extend the response and/or focus on other themes that highlight the latest and greatest in children's and young adult literature.

Read, Sketch, Review, and Rate:
## First-Grade Book Reviews

Robin Duran

My first-grade students at University Schools, a charter school in Greeley, Colorado, have been busy reading and writing. They have created book reviews and illustrations using the inquiry process. The students began by reading book reviews that were written by other young students to get an idea of what they were going to be writing. We found these mentor texts at the Spaghetti Book Club website, www.spaghettibookclub.org.

Then they picked books that they could read independently and read them a few times. A few students picked books from the early phonic readers too. After that, they created their own book reviews. Based on what the students noticed in their mentor texts, they came up with three distinct parts of a book review. These included a short summary of the story, a favorite part, and a recommendation. After going through the writing process, the students even typed their final products.

This was an exciting time for the students because after they published their writing, they practiced reading their own book review so they could make an augmented reality video link to their books. I took a video, on an iPad, of each student reading his or her own book review. Then I used the Aurasma app to link the cover of the book to the video. We placed paper copies of our book reviews in our school library to share with a larger audience.

We all thought we were finished at this point, but then our class was asked to submit these book reviews to the *Colorado Reading Journal*. So we looked at the mentor texts from past issues online. We noticed what kinds of pictures students created and that each book had a rating system. Each student drew an additional picture and created a rating system for their book reviews. They also noticed that all the images were full bleed, drawing on their knowledge of how picturebooks work, and revised their sketches as well. This was a lot of work for these first-grade writers, but they were so excited at the idea of being published in a real journal!
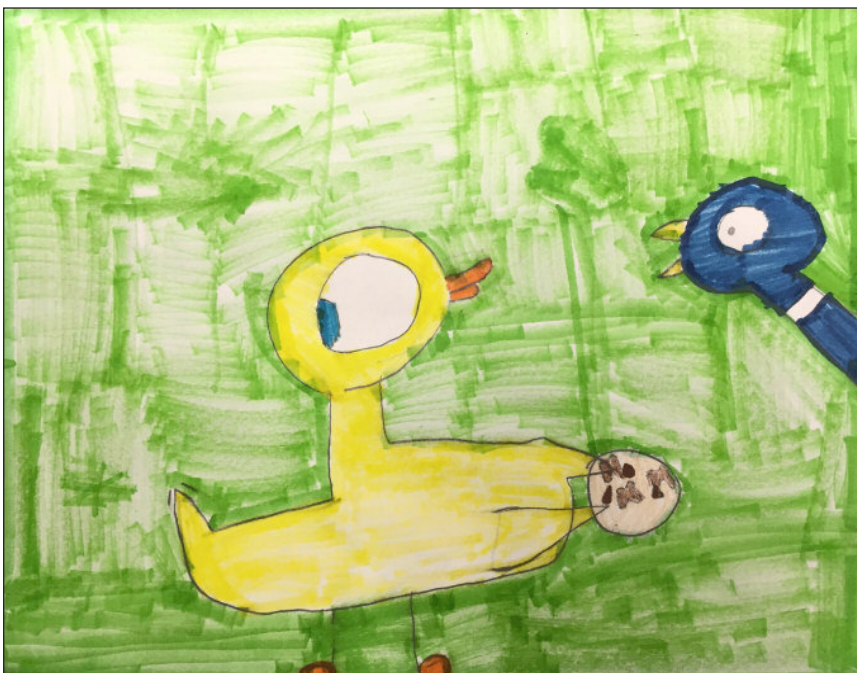
The Duckling Gets a Cookie
Written by Mo Willems
Reviewed by Malia (age 7)

First, the yellow duckling asked for a choclit and nuts cookie. Next, the blue pigeon came. Then, the blue pigeon saw that the yellow duckling has a cookie. Last, the yellow duckling asked for a cookie because I like cookies. I recommend this book to people who like nut and choclit cookies.

Malia gave this book 5 cookies out of 5.

Is It Time?
Written by Marilyn Janovitz
Reviewed by Tesla (age 6)

First, Ted took a bath. Next, Ted yssed [used] the towel. Then, Ted brashed [brushed] his fangs. Last he went to bed. My favrit part was when they tell time because I like to tell time too! I recommend this book to peepl who like to sleep and tell time.

*Tesla gave this book
5 moons out of 10.*

Chicka Chicka Boom Boom
Written by Bill Martin Jr. and John Archambault
Reviewed by Madelyne (age 7)

First, the alphabet runs up the coconut tree. Next, when the whole alphabet is in the coconut tree they fall down. Then, mom and dads dust off their children. Last, A gets of bed. My favorite part is when A gets up at night because I infer that is going to happen again. My connection is that I get up at night too. I recommend this book to people who like the alphabet.

*Madelyne gave this book
3 A's out 5.*

Don't Let the Pigeon Drive the Bus!
Written by Mo Willems
Reviewed by Lanae (age 7)

First, the blue pigeon woned [wanted] to drive the bus. Next the bus drivr said no. Then, he was geting sad. Last, the pigeon woned [wanted] to drive the truck. My favrit part was when the blue pigeon wonted to drive the blue bus then the truck becas I'v woned to drive the bus and the truck. I like the wrd's in the speech baball [bubble]. I recommend this book to people that like busses and pigeons.

Lanae gave this book 5 buses out of 5.

Don't Let the Pigeon Stay Up Late!
Written by Mo Willems
Reviewed by Rebekah (age 7)

First, a man needs to brush his teeth. Next, the blue Pigeon wants to stay up late. He says there is a cool bird show on T.V. He asked for five more minutes! Last, he yawned pretty long. My favirte part was when he slept because I love sleeping. I feel like the Pigeon is funny. I recommend this book to people who love sleeping.

Rebekah gave this book 5 pigeons out of 5.

Robin Duran *has taught elementary students for 11 years. Robin currently teaches first grade at University Schools in Greeley, Colorado. She is finishing her master of arts degree in reading from the University of Northern Colorado. Reading is her passion and she is always looking for ways to integrate technology into her class. Robin received a Technology and New Literacies grant from the Colorado Council International Reading Association that will help support this passion. She can be reached at rduran@universityschools.com.*

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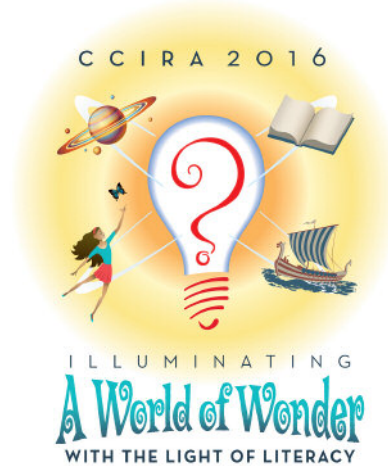
Letter From the Conference Chair

AMY NICHOLL

Excitement is building toward the 2016 CCIRA Conference on Literacy. This year's theme, "Illuminating a World of Wonder With the Light of Literacy," brings with it an energy that will continue to grow as conference time nears. This year we are focusing on creating a new sense of wonder in our classrooms. Whether you are teaching preschool or college, whether you're a classroom teacher, a literacy specialist, or an administrator, the 2016 CCIRA Conference on Literacy is for you! Join us and explore new ways to engage students in learning.

Mark your calendars now for February 3–6, 2016, and join us in learning from the best in the nation! Our keynote speakers will both motivate and challenge us! Keynote speakers include: Dr. Adolph Brown, Ellin Oliver Keene, and Regie Routman! We will have special sessions where you will be able to sit with a small group to talk personally with Ruth Culham, Smokey Daniels, and Regie Routman!

Also, don't miss out on the author luncheons this year…they are going to be a blast! Steve Spangler will be in the building. With Steve presenting, one never knows quite what will happen, except you know for sure you will leave the luncheon with a big smile and new energy to take back to your classroom.

Cynthia Lord and Gordon Korman will provide engaging opportunities to find out more about how they write their award-winning books. Educators will glean new information to use in their classrooms from the other luncheon speakers: Jennifer Serravallo and Georgia Heard. Some of the other fascinating authors that will be presenting sessions include: Pascal Lee, Jeffrey Bennett, Nathan Hale, Jennifer Dizmang, and many more. So don't miss these great opportunities!

These are just a few of the amazing speakers and authors coming to the **2016 CCIRA Illuminating a World of Wonder With the Light of Literacy Conference** on February 3–6, 2016! Visit the CCIRA website to learn more about the conference throughout the year!

Dr. Adolph Brown   **Steve Spangler**   **Pascal Lee**

ILLUMINATING

A World of Wonder

WITH THE LIGHT OF LITERACY

|		
Janet Allen	Georgia Heard	Frank Serafini
Jeffrey Bennett	Teresa Higgins	Jen Serravallo
Kim Bevill	Jane Hill	Margo Southall
Herb Broda	Mark Hoog	Steve Spangler
Dr. Adolph Brown	Linda Hoyt	B.J. Stone
Joanna Bruno	Ellin Oliver Keene	Cris Tovani
Jan Burkins	Gordon Korman	Anne Tweed
Brian Campbell	Pascal Lee	Diana Velez
Pam Coke	Cynthia Lord	Kyle Webster
Ruth Culham	Jovan Mays	Dr. Ken Wesson
Harvey "Smokey" Daniels	Heather Montgomery	Deborah Wiles
Jennifer Dizmang	Marc Tyler Nobleman	Jeff Wilhelm
Marcia Edson	Eric Ode	Rick Wormeli
Teresa Funk	Judy Rose	Jonathan Wright
Alan Gratz	Regie Routman	Kim Yaris
Nathan Hale	Laurie Rubin	Suzette Youngs

CCIRA 2016
Conference on Literacy
FEBRUARY 3-6, 2016

Online Registration begins November 1
at ccira.org
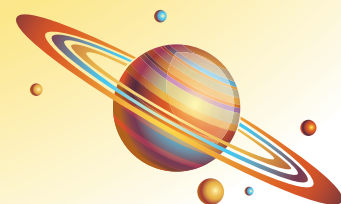
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