

TEACHING CRITICAL LITERACY: THE INTERDISCIPLINARY APPROACH OF A RURAL ELEMENTARY TEACHER PREPARATION PROGRAM



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Teacher Candidate 1: “Dr. White collaborated with Dr. Kennedy for us to be able to do an in-depth project around finding an anti-bias text and facilitating equitable talk around it. I think their collaboration benefited students [...]. It encouraged me to go the extra mile.”

Teacher Candidate 2: “I also loved that Kristen partnered up with our math professors for an assignment. It gave us a solid view of what it looks like to integrate courses.”

THE COMMENTS ABOVE were shared anonymously by teacher candidates (TCs) in their Spring 2021 and Fall 2021 course evaluations and illuminate the benefits of interdisciplinary and collaborative approaches to elementary teacher education. Specifically, comments like these motivate us—two white female teacher educators in a rural, predominantly white, midwestern university—to explore how children’s literature can be leveraged in culturally relevant and interdisciplinary ways to challenge narrow notions of the utility of picture books in K-5 classrooms and support the development of critical literacy orientations in our teacher candidates. At our institution, TCs’ demographics mirror those of the U.S. teaching profession; according to the National Center for Education Statistics (US Department of Education, 2018), a primarily white female teaching staff teaches an increasingly culturally and linguistically diverse student population in the

United States. Thus, it is imperative that we—teacher educators and teacher candidates—continuously interrogate our thinking in order to broaden our perspectives and contribute to the construction of a more just world.

Rooted in the work of Freire (1970/2018), *critical literacy* is a disposition wherein consumers examine texts with suspicion (Luke, 2009). In this study, we define text broadly to acknowledge its dynamic evolution. Text is multimodal, representing humans’ various sophisticated modes to communicate meaning. As a “set of practices and stances” (Pandya & Ávila, 2014, p. 1) that represent a way of being, learning, and living in the world (Vasquez et al., 2019), critical literacy allows us to cultivate an antiracist approach to curriculum, instruction, and assessment in our elementary teacher education coursework. It encourages TCs, through self-regulation and other critical thinking practices, to outgrow (mis)conceptions regarding text neutrality, when and if they exist. Critical literacy foregrounds how text—the printed word and the world—conveys meaning that constructs and perpetuates marginalization and oppression to uphold power and privilege.

Teacher educators often expect TCs to embrace critical literacy orientations, yet criticality does not come naturally for some students. Thus, teacher educators have designed learning experiences to help TCs to (1) develop the knowledge and dispositions needed to teach critical literacy for social justice (e.g., Linder & Falk-Ross, 2020; Skerrett, 2010); (2) know how to implement critical literacy in the early childhood classroom

(e.g., Norris et al., 2012); and, (3) understand how to use picture books to foster critical thinking and critical literacy skills (e.g., Ahmed & Ali, 2020; Lee, 2016; Nguyen, 2021; Wells et al., 2022).

Relatedly, researchers posit that *critical thinking* entails a set of cognitive skills at its core: interpretation, analysis, evaluation, inference, explanation, and self-regulation (Facione, 2011). The application of critical thinking is recursive. In other words, critical thinkers apply their thinking to themselves to self-regulate their previous notions. In addition to this set of cognitive skills, experts argue that critical thinking is a disposition (Facione, 2011); critical thinking, like critical literacy, is an approach to being or having a “critical spirit” (p. 10). Critical thinking and critical literacy are similar in that both are “cognitive dispositions” (Williams, 2005, p. 165). Together, critical thinking and critical literacy are a helpful conceptual framework for teacher educators seeking to mobilize critical dispositions into action.

Guided by the practices and dispositions of critical thinking (Facione, 2011), this study responds to Yuan and Stapleton’s (2019) call to prepare teachers with both a critical mindset and the pedagogical competence to promote critical thinking in school contexts. Using design-based research (DBR; Reeves, 2006), we asked the following research question: *How did TCs develop critical literacy orientations through the use of critical thinking skills when deciding which texts to introduce in their future classrooms?*

Our Context

Our institution is a four-year, rural-serving, public university located in a Midwestern community in the United States. The university’s teacher education program offers elementary, secondary, and special education certification pathways and graduates approximately 100 teacher candidates annually. TCs pursuing teacher certification in elementary or special education must enroll in concurrent methods courses in four core content areas preceding their student teaching experience. This study focused on the university’s elementary math and literacy methods courses in the spring and fall semesters of 2021. Over these two semesters, enrollment in the math and literacy courses included 45 TCs, with 39 TCs identifying as white, 1 as Latinx, 1 as biracial, 3 as Asian, and 1 as Black. Forty of the TCs were female and 5 were male. Ten were pursuing K-12 certification in special education, and 35 were elementary education majors. All 45 were concurrently enrolled in both

the elementary reading and math methods courses.

As teacher educators and education researchers, it is important to pause here and consider how our identities impact how we read the word, the world, and, specifically, the data coming from our classrooms. Our identities as white, middle-class women are in keeping with national trends in the U.S. teaching profession (Sleeter, 2011). We bring 13 years of K-12 teaching experience to the teacher education classroom and 16 years of experience working within university-based teacher preparation programs. Kristen taught in elementary general education, middle school Spanish, and technology classrooms before switching to teacher preparation. Laura was certified in math and English language arts at the secondary level, taught conversational and academic English overseas for many years, and then returned to the States to begin work as a teacher educator. This study occurred in our classrooms and emerged organically in response to shared experiences and mutual commitments to culturally relevant and culturally sustaining pedagogy.

Our Inquiry

In response to some TCs’ resistance in previous years to assigned course readings (e.g., Baines et al., 2018; Berlin & Berry, 2018) and discussions about race, racism, and white privilege in our respective courses, we developed an interdisciplinary intervention across our math and literacy methods courses consisting of a two-part shared project. This project aimed to create an opportunity for TCs to employ critical thinking skills while developing a critical literacy orientation. In the long term, we hoped to encourage TCs to continue active engagement in examining and dismantling the systems of oppression in their classrooms through, among other things, the use of culturally relevant and culturally sustaining children’s literature.

Interdisciplinary Two-Part Project

The interdisciplinary collaboration evolved from a shared commitment to justice-oriented education in the courses we teach. Kristen (elementary literacy methods) and Laura (elementary math methods) designed and continue to refine the project, known as Facilitating Equitable Talk (FET), in which teacher candidates critically evaluated children’s literature through an antiracist lens and analyzed how the text could be used to facilitate equitable discussions of its mathematical content. Citing Derman-Sparks (2016), we provided candidates with the following rationale for the project:

Texts are not neutral. Therefore, it is crucial that you have the skillset and dispositions to critically analyze and select texts for children and youth that positively affirms their self-concept, teaches content accurately, and fosters positive attitudes about diversity like race, ethnicity, gender, economic class, sexual orientation, disability, language, and religion.

In the first part of the project, TCs worked together as a class to create an antiracist rubric for assessing picture books. Then, individually or with a partner, they evaluated a mathematically-themed picture book using this jointly-constructed rubric. The second part of the project asked candidates to identify a K-5 math standard from the Common Core State Standards that aligned well with the content of their chosen picture book and design a lesson plan on how to launch and facilitate a hands-down conversation¹ (Wedekind & Thompson, 2020) with children using this text. Appendix A provides the TC-generated rubric from Fall 2021, which was based on their readings of *Reading Diversity Lite* from Learning for Justice and *10 Quick Ways to Analyze Books for Racism and Sexism* from Worlds of Words work in critical literacy. Additionally, candidates viewed a video in class entitled *Freedom Reads: Anti-Bias Book Talk* (Brown, 2020) in preparation for developing the antiracist rubric. A partial list of mathematically-themed picture books available for TCs' use in this two-part project are in Appendix B.

Research Design and Data Analysis

DBR (Bradley & Reinking, 2011; Reeves, 2006) attempts to guide and inform educators as they improve practice and research (Anderson & Shattuck, 2012). Our inquiry drew on the four phases of DBR: collaboration between researchers and practitioners to identify a problem; solution design; iterative testing and refinement; and, reflection for continuous improvement (Reeves, 2006). In the project's first iteration, TCs were involved in designing and implementing an antiracist rubric to evaluate children's picture books. The rubric allowed us to ensure that TCs chose texts with a critical eye towards representation (e.g., race, class, gender, ability) as well as mathematical content and/or practices.

¹ Hands-down conversations allow students to take ownership of and have more decision-making power in whole group conversations as they collectively construct meaning (Wedekind & Thompson, 2020).

While jointly grading TCs' projects, we took detailed notes and recorded our conversations so that we could make changes to future iterations of the project and our courses. In this way, DBR held us accountable for continuously improving our courses and TCs' learning; it also supported a collaborative approach to further develop our own critical thinking skills and critical literacy enactments as teacher educators.

To understand the interplay between critical thinking skills and critical literacy orientations, we used a post-qualitative analytic approach that allowed us to "think with theory" (Freeman, 2017; St. Pierre & Jackson, 2014, p. 717). Data analysis was a recursive process. Using categorical thinking (Freeman, 2017), we grouped TCs' text analyses into categories based on criteria informed by the theoretical framework. To do this, we compared TCs' work to the antiracist rubric and noted the ways in which they read the picture book using a critical literacy lens. We returned to the theory often—rereading literature related to critical thinking, critical literacy, and the interplay between the two—in order to refine our understanding of the data.

By comparing TCs' work and noting the similarities and specific differences between the text analyses, we were able to attend "to the features or attributes that essentially define particular items as instances of a category" (Polkinghorne, 1995, p. 10). Through this iterative process, we identified four categories, each of which involve resemblances or common features (Maxwell & Miller, 2008); the categories were *stereotypes and tropes*, *diversity of lived experiences*, *invisibility*, and *self-regulation*. Since we recognize that essentializing phenomenon is one limitation of reducing data units into categories, we use narrative thinking to organize and present the findings (Brooks, 1984).

Discussion of Findings

Knowing that we cannot speak with the desired level of depth and richness to the critical thinking skills nor the critical literacy orientations of all 45 TCs in a single article, we chose to feature the work of five TCs in narrative form. Each narrative serves as a representative sample of each of the four categories mentioned above and illuminates an exemplary text analysis irrespective of TCs' identities, such as race and gender.

Stereotypes and Tropes: Neil² Many TCs focused on tropes in their text analysis project, explaining the ways in which picture book characters were depicted in stereotypical ways

² All names are pseudonyms.

through the storyline and/or illustrations. Neil, a white male special education major enrolled in our Fall 2021 courses, read his text several times. With each rereading of the picturebook, Neil approached the word (i.e., the text) and the world with growing suspicion, thus honing his critical literacy lens.

In the elementary math methods course, Neil was eager to participate and quick to offer possible solutions or strategies when working through math problems. However, it was during hands down conversations (Wedekind & Thompson, 2020) about teaching math when Neil was at his quietest. In one self-examining reflective discussion, Neil shared with his group that he had always identified as a student who was “good at math,” so he had never felt the need to question traditional instructional approaches.

Neil selected Lazar’s (2017) *7 Ate 9: The Untold Story* for the interdisciplinary FET project. In his initial evaluation of the text, Neil wrote that “the only characters in this book are numbers of all different colors like blue, pink, and green. There are no stereotypes or people for that matter in this book.” He concluded the evaluation by asking, “halfway through this assignment, I realized that my text might not be the best for this assignment. Is there any chance I could change books?” Laura met with Neil the following week to consider his request. As they read the story aloud together, Laura asked Neil what he noticed about how the characters were portrayed in the text. Neil flipped through the pages, pausing on a page where a waitress stood behind a counter dressed in high heels and an apron. Using his thumb to save this page, Neil then flipped back to a previous page where the character 8 was depicted wearing high heels and a belt cinched at the waist. Neil then shared that he may be noticing a trend in the female characters. Laura invited Neil to go home and analyze the text one more time before submitting the assignment.

In his second text analysis, Neil interpreted the illustrations and storyline as reinforcing gender stereotypes, noting, “There is a male detective and a female waitress. The separation between genders and their jobs gives off a message of stereotypical gender roles.” He also noted typecasts regarding female beauty, writing, “All of the female characters in the book are wearing high heels” and “There is also a lady who is 0, but she wears a tight belt to look like an 8. This is a stereotype about women and the hourglass figure.” Neil added, “There is no reason for that character to be female or gendered for that matter.”

Neil’s reading of the word (i.e., picture book) shifted over time; each pass through the text led to a more careful and critical

analysis. When discussing the assignment in class a few weeks later, Neil commented that he was no longer able to “unsee” the stereotypes. And while some TCs who identified underlying biases in their evaluations of other texts commented that if the picture books had been published more recently, the TCs would expect to see more diversity and inclusion, Neil read the world in a less forgiving way, writing, “In 2017, we knew better about gender roles.” The word “we” in this statement suggests that Neil was drawing on his emerging self-regulation skills to critically read the world as a whole, himself included.

Diversity of Lived Experiences: Brooklyn and Bailey The second category evident within TCs’ text analyses illustrated the fine line of striving to represent diversity among lived experiences without engaging in tokenism or oversimplification. TCs’ projects within this category questioned the depiction of picture book characters who, for example, spoke regional dialects or faced mental health concerns. Brooklyn and Bailey’s analysis of math anxiety, as depicted in the main character of their chosen picture book, represents this category well.

Brooklyn, a Latinx, and Bailey, a white female and fellow special education major, were nearly inseparable in the teacher preparation program. They took nearly every course together and often opted to collaborate on class projects. This interdisciplinary project was no exception. Brooklyn and Bailey selected *Math Curse* (Scieszka & Smith, 1995) as the focus of their text analysis. They were skeptical of the text in the beginning, wondering if the text may inadvertently oversimplify anxiety, or math anxiety more specifically, among children. However, Brooklyn and Bailey ultimately argued that the picture book would be an important addition to a classroom library because “students who feel anxiety when it comes to math” and students who know “how debilitating it [anxiety] can be” would easily relate to the main character who becomes anxious after “her teacher tells her that she can think of almost anything as a math problem.”

To avoid tokenizing individuals with anxiety, Brooklyn and Bailey explained that “other pieces could add to the conversation.” They reasoned that they would be able to enhance the reading of the picture book by incorporating other texts associated with social-emotional learning.

Invisibility: Yara Some TCs evaluated the mathematically-themed picture books we provided them with suspicion, asking not only what was represented but also what was missing,

Based on their evaluations, TCs then made inferences about invisibilities within children's literature more broadly. For example, Yara, a Black female elementary education major, whose orientation toward the text led her to notice the Eurocentricity of picture books and, in particular, the invisibility of multilingualism within children's literature.

Yara was an advocate of social justice and volunteered with a local reading council to paint a newly-established lending library filled with culturally diverse books for children and youth in the local community. Mathematics was not Yara's favorite subject, and she often defaulted to her peers' strategies and solutions in class. Yet, Yara was quick to contribute to the conversation in the moments when we considered issues of racial and linguistic privilege in mathematics education.

When considering which text to use in the interdisciplinary project, Yara based her selection on a personal connection she made to the text. Yara spoke multiple languages, including Portuguese, and she had recently studied abroad in Brazil, so when she noticed that Crespo's (2020) *Lia and Luis: Who Has More?* featured a Brazilian family and the Portuguese language, she was sold. In fact, Yara noted one of the strengths of Crespo's picture book was that the characters blurred linguistic boundaries, moving fluidly between Portuguese and English, writing:

I really like bilingual books, and I think they should be a part of every classroom library. I also think that if you're going to read a bilingual book to children, you should take the time to learn how to pronounce the words that aren't in English properly.

When discussing their text choice in class, one of Yara's peers asked her if she would recommend the text to teachers who do not speak Portuguese. Yara directed the TC to the glossary at the back of the text, where the Portuguese words were translated and written phonetically. In her written rationale for the text, Yara noted that the question of who has more would be "relatable to kids, especially those with siblings" even if the language of the text was not familiar; two children arguing over who has the larger portion of food is ubiquitous.

Yara's text analysis went beyond the reading of the word; she also considered how this text aligned with the world at large. Yara concluded her text analysis by arguing:

It's important to note that Brazil is majority black while Brazilian media is majority white. This book

isn't an exception to that. If this [text] were to be included in my classroom library, I think there should also be other books featuring mostly black people, as this is how Brazil is in reality, and I think the classroom library should have similar demographics as the real world.

By reading the word and the world simultaneously, Yara questioned the (unintended) messaging of underrepresentation, calling for educators to build classroom libraries that mirror the racial and linguistic diversity of the world.

Self-Regulation: Sam As a cognitive disposition, self-regulation requires questioning, confirming, and/or correcting one's reasoning or results (Facione, 2011). A small number of TCs' text analyses called on authors of children's literature to self-regulate when making decisions about a picture book's theme, plot, characters, and/or illustrations. As a white male elementary education major, Sam's critical literacy orientations had him questioning an author's reasons for casting yet another young white male in the role of a hero.

In both of our courses, Sam was not only a willing and active participant in conversations; he was an equally good listener. In the literacy methods course, Sam did not shy away from critical conversations. He used course assignments, for example, to address community-building, the validity of African-American Vernacular English (AAVE), and animals' adaptation as a result of climate change and continued deforestation. For the interdisciplinary two-part project, Sam's text selection was guided by his upcoming student teaching placement. He selected *Max's Math* (Banks, 2015) in hopes that he could use it with his future students.

In Section 2 of the rubric (see Appendix A), Sam inferred that the invisibility of diverse characters could unintentionally result in the reinforcement of a white male savior typecast, writing, "The boys save the day on a few occasions in the story. This is important for representation for white boys, but lacks representation for people of different race or gender." While Sam described Banks' text as "a very neutral text," he made his emerging critical literacy orientations clear by problematizing text neutrality. Sam explained, "While it [the text] doesn't take any action to promote negative stereotypes or biases, it doesn't do anything to elevate or represent underrepresented races or cultures." Sam then argued that, through self-regulatory practices, the author could have rewritten the word (i.e., picture book) to better align with the world, suggesting a number of revisions:

Max could have been Marion. The characters could have been based in a different culture. *Authentic* tie-ins could have been made to that culture throughout the introductory expository ‘building a cart’ scene and throughout. Could the residents of Shapesville and Count Town have been *not* shapes and numbers? (stress in original)

Sam’s concurrent reading of the word and world led him to question the impact of text neutrality; he considered what a neutral text communicates to its reader and how the text could be rewritten to amplify diverse voices and perspectives.

Looking Ahead

Although neither critical thinking nor critical literacy are new topics in teacher education scholarship, the possible interplay between the two has gone un(der)discussed, particularly in rural research contexts, a space often positioned as deficit instead of merely different (White & Corbett, 2014). Furthermore, Morrison et al. (2021) noted the importance of stretching conversations of culturally responsive teaching across multiple courses in order to delve deeper into theory and explore practical applications. Our interdisciplinary approach to this study brought the conversation of criticality out of any particular silo and demonstrated its relevance for TCs across contexts and content areas.

Critical literacy may not always be prioritized in traditional elementary methods coursework—literacy or otherwise—because predominantly white female teacher educators work within teacher preparation programs consisting of mainly white female teacher candidates. Thus, perhaps it is unsurprising that many TCs grapple with reading the word and the world critically. School is an institution that remains fraught with oppressive structures and systems. White teachers and teacher educators who may benefit from such structures and a Eurocentric curriculum are challenged when asked to read the word and world critically and recognize, let alone transform, systemic inequities. Just as access to high-quality, diverse book collections is a matter of justice (Hadjoannou, 2021), so is the teaching of critical literacy in teacher education.

This study demonstrates one approach for mobilizing critical literacy as a disposition: scaffolding TCs’ emerging critical literacy orientations through critical thinking skills (Yuan et al., 2020). In our interdisciplinary efforts to prepare TCs with the dispositions to take up culturally relevant and culturally sustaining pedagogies, we found that by scaffolding

TCs’ critical thinking, we provided them with the necessary tools to work toward enacting critical literacy. Neil explained how illustrations reinforced gender stereotypes; Brooklyn and Bailey considered the fine line between representation and tokenism; Yara called for educators to align their classroom libraries with the racial and linguistic diversity of the world; and, Sam made a case for how a seemingly neutral text could be reimagined, through acts of self-regulation, to include characters from more diverse backgrounds. Instead of witnessing TCs’ resistance to course readings and discussions about racism, class, and other forms of marginalization, which had been common in past iterations of our courses, we observed TCs’ increased engagement with critical literacy through the interdisciplinary FET project. We believe that weaving both critical thinking and critical literacy across our courses helped TCs recognize the need for criticality in the field of elementary education.

Hendrix-Soto and Mosley Wetzel (2019) remind us that it is through continued practice and intentional shifts toward asset perspectives and multiliteracies that TCs will gain the tools necessary to “make continual inquiry into inequities in education [...] and thus to make their classrooms spaces where critical literacies are available for their students as well” (p. 212). We hope that in sharing our ever-evolving work, other scholars will consider forming their own interdisciplinary collaborations in search of new and innovative ways of foregrounding critical literacy in professional teacher preparation programs writ large. As educators, we are at a critical juncture where the political interference in schooling at the local and state levels has further illuminated systemic disparities. The pervasive challenges to K-12 curriculum, and to children’s and young adult literature offerings in school districts and public libraries across the United States, are curtailing children’s access to and engagement with diverse literature. Thus, as teacher educators, it is imperative that we create opportunities for our teacher candidates to continuously interrogate their own critical consciousness and adopt a critical literacy orientation to co-construct a more just world. •

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Appendix A

RUBRIC DESIGNED BY FALL 2021 TEACHER CANDIDATES

<p>Step 1:</p> <p>a) Look for stereotypes b) Look for tokenism</p>	<p>Is a character generalized by their race, sexuality, class, disability, etc.? Was a Person of Color included as an add on? Do People of Color look stereotypically alike or are they depicted as genuine individuals with distinctive features? Are multiple diverse books included?</p>
<p>Step 2:</p> <p>a) Look for invisibility b) Check the storyline and relationships between people</p>	<p>What identity is not reflected in the book? Are any of the following reflected in the book?</p> <ul style="list-style-type: none"> • Families who live in rural areas • Blue-collar workers • Musicians, artists, and writers • Families with two dads or two moms • Single mothers or fathers • Homeless families • Families with an incarcerated parent • People of Middle Eastern descent • Families who practice Islam • Transgender adults and children <p>Who is in the background? Why? What negative stereotypes are being reinforced?</p> <ul style="list-style-type: none"> • Asian child as the smart, quirky friend? • Female achievements based on looks rather than initiative/intelligence? • Low-income families and people with disabilities are depicted as needing help? • White men in leadership/hero roles?
<p>Step 3:</p> <p>Look at messages about different lifestyles</p>	<p>Book collection should be filled with a variety of different lifestyles Do images and information go beyond oversimplification and offer genuine insights into the book characters' lifestyles? Does your book collection depict diversity among people within a specific racial/ethnic group, such as a range of family structures, living environments, socioeconomic conditions and types of work, and male/female roles within the family? Are negative value judgments implied about ways of life that differ from the dominant culture or economic class?</p>
<p>Step 4:</p> <p>a) Watch for loaded words b) Look at the copyright date</p>	<p>Does the book use inclusive terms? Does the story contain adjectives that could be seen as hurtful to a particular group of people? Are words used in a negative context? Does the book contain a recent copyright date? Does the information in the story align with the copyright date?</p>
<p>Step 5:</p> <p>Assess the appeal of the story and illustrations for young children</p>	<p>Is the book age-appropriate? Are the illustrations colorful for young children? Are the illustrations recognizable to young children? Are there specific signs of diversity? Examples: single-parent homes, families of color, families of different beliefs, same-sex parents, families of different classes. Is the book respectful, accurate, and caring?</p>
<p>Step 6:</p> <p>Look for books about children and adults engaging in actions for change</p>	<p>Does your book collection include a balance of people who have made important contributions to American life as well as the world community— and not just the traditional white, male “heroes?” Do some of your books about important people include struggles for justice? Do your books show people who were/are poor from racial/ethnic groups of color? Are people with disabilities engaged in struggles for justice?</p>

Appendix B**SAMPLE LIST OF MATHEMATICALLY-THEMED PICTURE BOOKS**

- Alznauer, A. (2020). *The boy who dreamed of infinity* (D. Miyares, Illus.). Candlewick Press.
- Banks, K., & Kulikov, B. (2015a). *Max's math*. (B. Kulikov, Illus.). Frances Foster Books, Farrar Straus Giroux.
- Crespo, A. (2020). *Lia and Luis: Who has more?* (G. Medeiros, Illus.). Charlesbridge.
- Demi. (2013). *One grain of rice: A mathematical folktale*. Zaner-Bloser.
- Fishman, S. (2017). *A hundred billion trillion stars: Can you imagine so many...of anything?* (I. Greenberg, Illus.). Greenwillow Books.
- Jenkins, E. (2012). *Lemonade in winter: A book about two kids counting money* (G. B. Karas, Illus.). Schwartz and Wade Books.
- LaRocca, R. (2020). *Seven golden rings: A tale of music and math* (A. Sreenivasan, Illus.). Lee & Low Books Inc.
- LaRocca, R. (2021). *Bracelets for Bina's brothers* (C. Prabhat, Illus.). Charlesbridge.
- Lazar, T. (2017). *7 ate 9: The untold story* (R. Macdonald, Illus.). Disney-Hyperion.
- Leedy, L. (1997). *Measuring penny* (L. Leedy, Illus.). Henry Holt and Company.
- McElligott, M. (2009). *The lion's share: A tale of halving cake and eating it, too*. Bloomsbury.
- Murray, D. (2016). *City shapes* (B. Collier, Illus.). Little, Brown and Company.
- Scieszka, J. (1995). *Math curse* (L. Smith, Illus.). Viking.
- Smith, D. (2020). *If the world were a village: A book about the world's people* (S. Armstrong, Illus.). Citizen Kid..
- Watson, A. (2021). *Is 2 a lot: An adventure with numbers* (R. Evans, Illus.). Tilbury House Publishers.
- Yim, N. (2020). *Luna's yum yum dim sum* (V. Kim, Illus.). Charlesbridge.