A Content Analysis of Fountas & Pinnell Leveled Literacy Instruction: Seeing What Our Children See

Abstract

This capstone was a content analysis of a commonly-used reading instruction program in the United States. A systematic analysis of character representations of gender, race/ethnicity, and disability was completed to examine the diversity within the Fountas & Pinnell Leveled Literacy Intervention program. The results of this analysis found that one of the most commonly-used instructional reading programs does not accurately or proportionally portray the diversity in today’s classrooms. Data was collected about the character representations of gender, race/ethnicity, and disability. The analysis of the data suggested that there was a lack of representation in some of these populations when compared to United States statistics.

Purpose

The intent of this study was to report the findings from a content analysis that explored the representations of diversity, including gender, race/ethnicity, and disability, of characters that are portrayed in the Fountas & Pinnell Leveled Literacy Intervention (LLI) program. This reading program is commonly-used for reading instruction across the United States (Schwartz, 2019).

Perspectives

Common practice for instructing developing readers is to build their skills by gradually introducing them to more complex texts. The instructional materials often provided to teachers to support students through this progression are known as leveled texts. These leveled texts
typically come in a set that includes a wide range of leveled reading materials and tools used to instruct students’ literacy development. The goal of the teacher, when using these kits, is to frequently assess students’ reading levels and then provide supported reading instruction. Instruction is suggested to occur at a level where the student learns most effectively; this level is referred to as the student’s instructional level. Instructional level follows from Vygotsky’s Theory of Zones of Proximal Development. This theory suggests that students can complete more tasks with teacher scaffolding than they could independently, and that the instructional space between too hard and too easy is where student learning is optimal (Chakilin, 2003).

Theoretically, the structure that literacy leveled kits use—namely assess, instruct, and reassess, allows for individualized instruction for each student, ensuring reading skill development occurs. Due to the efficiency and proven success of leveled literacy programs (Ransford - Kaldon et al., 2010), many districts across the country purchase large sets of these texts and use them in each grade level within their schools (Ransford - Kaldon et al, 2010). One of the most commonly used leveled text systems in the U.S. is the Fountas & Pinnell LLI program (Schwartz, 2019).

Leveled texts have proven to be an efficient tool for reading instruction but they have taken on some criticisms. For example, researchers showed that an over emphasis of leveling students and assessing students against an expected progression of growth shapes the way teachers think about reading instruction (Kontovourki, 2012). Leveled texts promote criterion-referenced assessment types which focuses a teacher’s lens on the amount of student progression rather than on students’ needs. Further, critiques of leveled texts highlight that leveling reduces exposure to complex texts which often help to motivate the reader (Glasswell & Ford, 2011; Rog
& Burton, 2002). Another downside: leveling often ignores the ways that students’ social and cultural identities impact the ease or difficulty of a text (Dzaldov & Peterson, 2005).

Readers that are exposed to literature which represents and includes characters of diversity are better able to understand their own identities and the identities of others. Texts that children read impact their self-awareness (Chaudhri & Teale, 2013). Literature also helps to give children support in developing their self-awareness (Hall, 2009; Levin, 2007). Further, literature gives children the opportunity to break and question stereotypes while broadening their cultural perspectives (Thein, Beach, & Parks, 2007). The impacts literature has on the reader is immense, therefore it is important to understand how texts that are used for instructional purposes impacts our students.

Reader Response Theory (RRT), (Rosenblatt, 1982), suggests that there should to be a social and cultural relationship between the reader and the text. This social and cultural relationship is formed when the readers can identify their social, and cultural worlds in the material of the text. When children are able to make these connections with texts, they are able to learn more. Children that can identify with a character in a text are more likely to have a deeper response to that text. This deep response creates strong connections between the reader and the text and allows the reader to learn more from the text (Dooley, Martinez, & Roser, 2012; Sipe, 2008). Texts that are used for instructional purposes should invoke these same connections to create deeper learning opportunities and allow students to take positive steps towards the development of their cultural identities. Bishop, (1990), claims that texts that inspire the reader to make cultural connections are texts that give deeper meaning to the reader. Instructional texts should allow students to make cultural connections as this promotes deeper learner.
The intent of this research is to examine how Fountas & Pinnell’s LLI portrays, includes and represents diversity in their instructional texts

**Methodology**

This study was a descriptive content analysis of the Fountas & Pinnell LLI system. The intent of this research was to determine if a commonly-used reading instructional program equally and accurately represented students in U.S. classrooms. A content analysis was completed with the goal of determining how diversity, specifically race/ethnicity, gender, and disability, was represented in human characters. Galda et al. (2000) noted that a content analyses can be primarily descriptive and quantitative, counting the representation, presence, and images of a particular phenomenon or cultural group found within a body of children’s books. “Questions about the images of ethnic, socioeconomic, and gender groups portrayed were answered by identifying specific criteria for analysis, then simply counting items that met those criteria in the selected sample of texts” (Galda et al., 2000, p. 363).

A database of texts was created from a kit of Fountas & Pinnell LLI system. A total of 320 texts were included in this kit. The system includes three sets of texts divided by color and level. The Green set targeted grades kindergarten through first grade with reading levels A-K. The Blue set targeted grades kindergarten through second grade with reading levels C-N. The Red set targeted grades two and three with reading levels L-Q.

Using coding systems from previous content analyses as a guide (Koss, 2015; Walski & Koss, in press), an *a priori* coding system was developed (Weber, 1990) using systematic content analysis procedures (Cohen et al., 2007). Definitions were created for each coding category: race/ethnicity, gender, and disability. Two researchers began by coding 20 books together and discussing their rationales for assigning each code. Next, both researchers coded 10
titles individually while in the same room, allowing for discussion or clarification if needed. Interrater reliability was achieved at 100%. Then the remaining texts were coded independently.

Each text was coded for the inclusion of human characters. 233 out of the total 320 books in the sample contained human characters. Humans were coded for the role they play in the text based on their impact on the story. Characters could be a) a main character (maximum of two per text), b) a secondary character (maximum two per text), or c) a background character (no maximum). Main characters were the people/persons the story revolved around. Secondary characters were specifically named in the text and the text would be altered in some way if the character wasn’t included. Background characters were represented in the text but were not central to story.

Characters’ genders were identified and coded based on descriptive gender characteristics, pronouns, or gender-specific language (Crabb & Bielawski, 1994). It was acknowledged that gender is non-binary, however for the purpose of data collection gender was classified into male, female, and neutral. Male and female characters were determined through identification of gender-related pronouns. Gender neutral characters had an absence of gender pronouns and/or gender-specific language.

Characters’ race/ethnicity representation was coded using the categories White, Black, Latinx, Asian, American Indian, Middle Eastern, Multiracial, other or unknown. The terminology and categories that were used were selected based on terms that are used by major children’s book award committees (American Indian Library Association, 2010; Asian Pacific American Library Association, 2010; Black Caucus of the American Library Association, 2003; REFORMA, n.d.).
Characters’ race/ethnicity representation was further examined for the type of cultural representation depicted in the text. Based on how the character and their culture was portrayed, texts were coded as Culturally Neutral, Culturally Generic, or Culturally Specific (Bishop, 1992). Culturally Neutral representations were texts that had multicultural faces portrayed or contained characters from minority groups. However, the depictions were based on skin color or physical features and were merely there as representation rather than having anything to do with the content of a text. All background characters were Culturally Neutral (Bishop, 1992, p. 45).

Culturally Generic representations were texts that "contain few, if any, specific details that might serve to define those characters culturally” (Bishop, 1992, p. 45). Culturally Generic representations offer a nod to a character’s culture but do not teach about the culture. Further, culture was not the goal of these texts, being multicultural was just a character trait. The final cultural representation code is Culturally Specific. Culturally Specific character representations were coded when a text would, “illuminate the experience of growing up a member of a particular, non-white cultural group” (Bishop, 1992, p. 44). To be coded as Culturally Specific, a character’s culture needed to be a part of the story and the text had to depict their culture in an authentic manner. Note that as White is often seen as the default in society, it was not coded as Culturally Specific.

Any disability that was apparent was coded either as a cognitive, emotional, or physical disability and a description of their disability was also included (e.g., glasses, use of wheelchair). Cognitive disabilities include any learning disability, emotional disabilities include any emotional disorder, and physical disabilities included any type of physical impairment (Crabb, & Bielawski, D. (1994).
Texts were also coded for genre (fiction, non-fiction, or informational), grade level equivalency, and the set in which they belonged (red, blue, or green).

Upon completion of coding, results were analyzed by systematic frequency counts and percentages of representations over the entire program and across color sets and specific grade levels. This allowed for the identification of patterns of diversity representations.

**Findings**

Of the 320 texts in the Fountas & Pinnell LLI program, 233 of them contained human characters. A total of 792 human characters appeared across all of the texts. The findings of the character representations in these 233 texts are shown below.

**Gender**

Looking across the 792 human characters in the Fountas & Pinnell LLI program, the majority of characters across main, secondary, and background character groups were male. 55% of total human characters were male, and 45% were female. Looking at the gender representation of main characters, 55% were male, and 45% were female. Secondary characters had more equal breakdown of 51% male and 49% female. A large difference was seen in the gender representations of the background characters, 57% of the background characters were coded as male, and 43% were coded female. Throughout the entire kit only two characters were coded for being gender neutral. One was a main character and the other a background character. See Table 1.
Table 1: Gender of Characters

<table>
<thead>
<tr>
<th></th>
<th>Main # (%)</th>
<th>Secondary # (%)</th>
<th>Background # (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>136 (46%)</td>
<td>97 (49%)</td>
<td>126 (43%)</td>
</tr>
<tr>
<td>Male</td>
<td>163 (55%)</td>
<td>103 (51%)</td>
<td>169 (57%)</td>
</tr>
<tr>
<td>Neutral</td>
<td>1 (.03%)</td>
<td>0 (0%)</td>
<td>1 (.03%)</td>
</tr>
</tbody>
</table>

**Race/Ethnicity**

Of the 792 human characters represented throughout the entire program, 56% were White and 44% were non-White. When main or secondary characters were non-White, they were typically depicted as Culturally Neutral. Table 2 shows breakdowns of race/ethnicity across main, secondary, and background characters.

Table 2: Race/Ethnicity of Human Characters

<table>
<thead>
<tr>
<th></th>
<th>Main # (%)</th>
<th>Secondary # (%)</th>
<th>Background # (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>185 (62%)</td>
<td>118 (59%)</td>
<td>137 (46%)</td>
</tr>
<tr>
<td>Black</td>
<td>48 (16%)</td>
<td>31 (16%)</td>
<td>61 (21%)</td>
</tr>
<tr>
<td>Latinx</td>
<td>31 (10%)</td>
<td>22 (11%)</td>
<td>42 (14%)</td>
</tr>
<tr>
<td>Asian</td>
<td>26 (9%)</td>
<td>23 (12%)</td>
<td>46 (16%)</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>3 (1%)</td>
<td>3 (2%)</td>
<td>4 (1%)</td>
</tr>
<tr>
<td>American Indian</td>
<td>1 (.03%)</td>
<td>0 (0%)</td>
<td>4 (1%)</td>
</tr>
<tr>
<td>Multiracial</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>3 (1%)</td>
<td>2 (1%)</td>
<td>2 (.06%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>297</td>
<td>199</td>
<td>296</td>
</tr>
</tbody>
</table>

**Main Characters**

In the 233 texts that had human characters, 297 were main characters. Of these, 185 (62%) of them were White and 112 (38%) were non-White. Of the non-White main characters, 16% were Black, 9% were Asian, and 10% were Latinx. There were three main characters represented as Middle Eastern, one as American Indian, and three that were unknown. There were no multiracial main characters. Examining the non-White representations showed that out
of 112 non-White main characters, 86 (77%) were depicted as Culturally Neutral, 17 (15%) were depicted as Culturally Generic, and only nine (8%) were depicted as Culturally Specific. See Table 3.

**Table 3: Culturally Neutral, Culturally Generic, and Culturally Specific Characters**

<table>
<thead>
<tr>
<th></th>
<th>Main non-White</th>
<th>Secondary non-White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culturally Neutral</td>
<td>86 (77%)</td>
<td>72 (89%)</td>
</tr>
<tr>
<td>Culturally Generic</td>
<td>17 (15%)</td>
<td>7 (9%)</td>
</tr>
<tr>
<td>Culturally Specific</td>
<td>9 (8%)</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>Total non-White</td>
<td>112</td>
<td>81</td>
</tr>
</tbody>
</table>

**Secondary Characters**

Exploring the secondary character representations showed similar results in regard to the proportions of representation. There are a total of 199 secondary characters, 60% White and 40% non-White. Breaking down the non-White characters further, 16% of the secondary characters were represented as Black, 11% were Latinx, 10% were Asian, three were Middle Eastern. There were no American Indian or Multiracial secondary characters. Examining the non-White representations showed that out of 81 non-White main characters, 72 (89%) were depicted as Culturally Neutral, 7 (9%) were depicted as Culturally Generic, and only three (1%) were depicted as Culturally Specific. See Table 3.

**Background Characters**

The analysis of background characters showed the largest representations of diversity throughout the program. Of 296 background characters, 46% were represented as White and 54% were represented as non-White. This is the only grouping of characters that reflected a majority of non-White representation. Background characters were coded as 21% Black, 16%
Asian, 14% Latinx, 1% Middle Eastern, 1% American Indian, and 1% unknown. No background characters were represented as multiracial.

**Disability**

Representations of physical disabilities were seen throughout the texts, however, there were no representations of cognitive or emotional disabilities. Of the 297 main characters there were 45 (15%) characters that had a physical disability. 25 (13%) of the 199 secondary characters had a physical disability. Only 14 (5%) out of 296 background characters had an identifiable physical disability. See Table 4.

<table>
<thead>
<tr>
<th></th>
<th>Main # (%)</th>
<th>Secondary # (%)</th>
<th>Background # (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Emotional</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Physical</td>
<td>45 (15%)</td>
<td>25 (13%)</td>
<td>14 (5%)</td>
</tr>
</tbody>
</table>

The physical disabilities that were seen throughout the characters were described by: glasses, blindness, amputation, diabetes, use of a cane, and use of wheelchair. See Table 5.
Table 5: Descriptions of Character Physical Disability

<table>
<thead>
<tr>
<th>Character Physical Disability</th>
<th>Main # (%)</th>
<th>Secondary # (%)</th>
<th>Background # (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glasses</td>
<td>38 (86%)</td>
<td>20 (80%)</td>
<td>13 (81%)</td>
</tr>
<tr>
<td>Blindness</td>
<td>2 (4%)</td>
<td>2 (8%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Use of wheel Chair</td>
<td>1 (2%)</td>
<td>2 (8%)</td>
<td>3 (19%)</td>
</tr>
<tr>
<td>Amputee</td>
<td>2 (4%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Use of cane</td>
<td>0 (0%)</td>
<td>1 (4%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>44</strong></td>
<td><strong>25</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Discussion**

Leveled reading interventions kits give teachers an effective way to monitor and scaffold learners’ literacy development (Ransford-Kaldon et al., 2010). We accept the argument that the primary intention of these materials is for instruction. We hold it to be self-evident that improving our methods of instruction should be done, if possible and practical. Since we have shown that accurately representing diversity makes leveled texts more effective at promoting literacy development, it follows immediately that these texts should accurately represent diversity. Literature that depicts diverse populations helps students become more literate and engaged in their learning (Hughes-Hassel, Barkley, & Koehler, 2009). Representations of diversity help students learn. Therefore, it is consistent with the intention of these materials that they accurately represent diversity.

When considering the representations of gender in this Fountas & Pinnell LLI kit there is some mirroring of the United States public school system. According to the U.S. Department of Education Office for Civil Rights (2012), the population of male to female public-school children is 51% male and 49% female. Overall, this kit represented males 55% of time and
females 45% of the time. There is a 4% over/under representation of gender when compared to
the national average.

The data suggest that this kit includes some representations proportional to The National
Center for Education Statistics (NCES) (2017) reports. The reports from NCES show the
national breakdown of the United States public school population as 49.5% White, 16% Black,
25% Hispanic, 5% Asian/Pacific Islander, and 1% American Indian (terminology used by the
NCES). When comparing these percentages to Fountas & Pinnell’s (F&P) character
representations of race/ethnicity we found that some identities were not proportionally
represented. There are over representations of White (61% in F&P: 49.5% according to NCES),
and Asian (10% in F&P: 5% according to NCES). There are also under representations of
race/ethnicity: Latinx (11% in F&P: 25% according to NCES), and American Indian (.02% in
F&P: 1% according to NCES). When comparing to NCES statistics we found that Fountas &
Pinnell proportional represented Black students with 16% of characters being identified as black.
This comparison shows that an attempt was made to include all race/ethnicity levels however,
some identities were overrepresented while others were underrepresented. The Latinx
racial/ethnic representations was greatly underrepresented while the White racial/ethnic was
largely overrepresented.

The Fountas & Pinnell LLI lacked representations of all disabilities when compared to
national statistics. The disabilities that were found in the kit only represented physical
disabilities. There were no instances of emotional or cognitive disabilities. This analysis coded
glasses as a physical disability, as without corrective lenses many individuals would have
impaired vision. Of the 69 main and secondary characters that had physical disabilities 58 (84%)
of them were identified because they wore glasses. However, the Individuals with Disabilities
Act (IDEA) does not include the wearing of glasses in their definition of visual impairment. Considering glasses as physical disability leads to a misrepresentation of physical disability in this kit. According to the NCES (Snyder et al., 2019), in the 2015-2016 school year 13.2% of U.S. public school students have a documented disability. The only disabilities that were found in the LLI program were physical, and of those physical disabilities a majority of them (84%) were coded due to the character wearing glasses. The definition used for physical disability led to misleading results and the creation of an over representation of physical disability when compared to NCES statistics. NCES defines “other health impairments” by loss of strength. This disability can be seen through the characters that use canes/wheelchairs. NCES states that 14% of students with documented disabilities have what is considered as other health impairments. Of Fountas & Pinnell characters with disabilities only 4.3% of them have what could be defined as “other health impairments.” A disability representation that is absent in Fountas & Pinnell’s LLI is learning disabilities. NCES statistics reflect that 34% of students with documented disabilities have a specific learning disability but, there were no representations of learning disabilities throughout this kit. Further, 10% of students with documented disabilities have Autism, however there were no representations of Autism throughout this kit. This kit very clearly did not proportionally represent students with documented disabilities in the United States.

Overall, the Fountas & Pinnell LLI program had representations that closely mirrored the majority of U.S. classroom’s gender and racial/ethnic populations. However, the program lacked representation of Latinx individuals and characters with disabilities. The discussion only considered characters that were in the main/secondary character roles. This is because if children see themselves only as background characters they may feel marginalized. The realization that characters like them never receive the spotlight or pivotal roles can have detrimental effects on
the development of their identity and confidence. It should be noted that the largest proportions of racial/ethnic diversity were seen in the background characters and that the only representations of disabilities were physical disabilities.

**Implications**

The results of our data reflected a disproportional representation of some identities. Students need to feel represented in their learning materials, not only to allow them to connect and learn but also to make them feel valued. As educators, it is our job to address social justice issues and address them in our classrooms. All students need equity, and the current proportions of representation in these instructional materials, although they contain some representation, does not adequately reflect every student. Being aware of potential biases or ignored populations is the first step, but awareness and the intentional inclusion of diverse populations in classroom materials to compensate for lack of representation is the next, most important, step. The We Need Diverse Books organization and movement (We Need Diverse Book, 2020) has called attention to the lack of diverse representation in the field of children’s book publishing. The next step is for educational publishers to pay attention to the diversity within their instructional materials and to give characters of diversity pivotal roles rather than just background roles. However, change takes time and we need to act now. We can do so by changing the way we represent the world in our teaching materials. By being aware that some students’ identities are not included in all instructional materials, we must make an effort to bring in additional resources that supplement for the lack of these representations. Knowing that students who have disabilities are not shown in The Fountas and Pinnell LLI program means we have to compensate by introducing classroom materials that do include and represent these students.
In order for students to learn at their full potential, they must be able to see themselves as a character in a text. The ability to identify with texts impacts students’ self-identities. The effects of children noticing that characters like them are, or are not, represented in the background has a lasting impact. Not only are children’s learning opportunities impacted but their self-efficacy is greatly impacted as well. This set of leveled texts was relatively representative of children, however, there were still gaps in representations. This seemingly subtle lack of representation hinders students’ ability to be proud of themselves and their culture. We as educators must take these implications seriously and compensate for the lack of representations in instructional materials.
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