Developing Culturally Relevant Literacy Assessments for Bahamian Children

Gertrude Tinker Sachs
Georgia State University

Annmarie P. Jackson
University of North Georgia

Tarika Sullivan
Georgia State University

Kamania Wynter –Hoyte
North Carolina Agricultural and Technical State University

Abstract

The strong presence of culturally relevant materials in classrooms is seen as an indicator of good teaching but the development and use of these materials is under-investigated. Similarly, the actual construction and use of culturally relevant materials for literacy assessment purposes is under-reported. This paper examines the development and field-testing of culturally appropriate reading assessment materials for primary-school children in the Bahamas. The construction of culturally relevant assessment materials relies on the deep and intimate knowledge of the context and the use of the materials involves analyses from several perspectives: estimation of readability levels, creation of a range of question and activity types, analyses of students’ performance and comparison with other literacy performance indicators. This paper describes the development and field-testing of culturally relevant materials in the Bahamas.

Keywords: Culturally relevant materials; culturally relevant assessment; developing culturally relevant materials; culturally relevant pedagogy in the Bahamas

DOI: 10.29329/ijpe.2018.129.10

---

1 Gertrude Tinker Sachs, Assoc. Prof. Dr., Georgia State University, Department of Middle and Secondary Education, United States.

2 Annmarie P. Jackson, Dr. Assistant Professor, University of North Georgia, Department of Middle and Secondary Education College of Education and Human Development, United States.

Correspondence: Annmarie.jackson@ung.edu

3 Tarika Sullivan, Dr., Georgia State University, Department of Middle and Secondary Education College of Education and Human Development, India. Email: tarikasullivan@gmail.com

4 Kamania Wynter –Hoyte, Assist. Prof. Dr., North Carolina Agricultural and Technical State University, Department of Agricultural and Technical, India. Email: kwynterh@ncat.edu
Introduction

The Center for Culturally Responsive Evaluation and Assessment (CREA) in the College of Education at the University of Illinois at Urbana-Champaign hosted its inaugural conference in April 2013. The call for proposals stated, “The Inaugural Conference is to bring together an interdisciplinary group of scholars from the United States and internationally to focus on the role of culture in theory and practices of evaluation and assessment.” The call for proposals also underscored the void that exists in studying the role of culture in our educational practices nationally and internationally. The conference organizers stated, “CREA conference will be unique in its definitive recognition of culture’s centrality to evaluation and assessment and will illuminate the landscape of culturally responsive evaluation and assessment, a space that remains largely uncharted” (http://crea.education.illinois.edu/crea). The uncharted nature of the development of culturally responsive instructional and assessment materials for smaller nations is also the context of this paper as we recognize the dominance and influence of large super powers like the United States in shaping the educational texts of other English-speaking countries in its proximity and beyond.

The Commonwealth of the Bahamas (hereafter the Bahamas) is located a mere 60 miles off the coast of Florida. An independent democratic nation and former British colony, the Bahamas owes much of its past and present economic, cultural, linguistic and historical influences to its colonial heritage, its proximity to the United States and its cultural connections to the other island nations in the Caribbean. Because the three locales are socio-politically, linguistically, historically and geographically connected through colonialism, the slave trade and English bi-dialectal patterns for example, the Bahamas shares close affinity and kinship with the African descendants who live in the eastern United States and the Caribbean (Cash, Gordon, & Saunders, 1991; Lee, 1974; Nero, 2006; Schneider, 2008). However, despite the strong cultural influences of the United States in particular (e.g. Hall-Campbell, 2011, p. 99), Bahamians pride themselves on a unique culture and maintain an identity that is expressly Bahamian. This paper is situated in the educational context of the Bahamas but draws on the wealth of literature that is United States-centric to inform our understandings of the issues of cultural relevancy in developing culturally appropriate materials and assessments for Bahamian children. Our researchers are all United States-based and of African descent with the first author being a citizen of the Bahamas and the three who follow being Americans. Two members of our team are first-generation Americans whose parents migrated from West Indian countries and one member was born and raised in Jamaica, subsequently moving to the United States.

This paper therefore draws on Tinker Sachs’s deep and intimate knowledge of her home country (2014a) which, as Merriam (2009) reminds us, is essential because “in order to understand the culture of a group, one must spend time with the group being studied” (p. 28). Tinker Sachs’s “ethnic, racial and cultural identity” similar to Geneva Gay’s statement are her “primary anchor” from which she studies “current educational realities and future possibilities” (2013, p. 53). The other three authors’ rich Afro-Caribbean and American backgrounds also inform, reinforce and also interrogate our (mis)understandings of the connections that exist within and beyond each other’s borders.

Culture is the heart of the matter because its multifaceted, intangible essence is who we are as human beings, Swarts-Gray asks the question, “Can you imagine going through elementary school without ever finding a book that includes characters that look like you or remind you of your family?” (2009, p. 472). Tinker Sachs (2014a) begs a similar and more extended question: “Can you imagine going through 12 years of schooling without ever having seen anyone that looked like you in school texts or never having read any books about your own history, country or cultural background?” Have our educational backgrounds, which are not built upon our rich cultural heritages, enslaved people of African descent (Woodson, 1933)? In his text, Mirror for Adjustment, Porterfield (1967) talks about the use of bibliotherapy to provide “cures for personal and social arrows” (p. 7) and even though Brown wrote about Bibliotherapy and its Widening Applications (1975), the applications have not been fully exploited in rehabilitating the damaging effects of a lack of culturally appropriate literature and assessments for peoples of African descent. There is, indeed, a void and such a void can be filled
by truly extending our conceptualization of bibliotherapy to one that wholeheartedly embraces culturally appropriate approaches in education to decolonize our minds and to reach places in our hearts that are yet untapped (Banks & McGee Banks, 2013; Gay, 2013, 2000). Just as Trounstine and Waxler’s Finding a Voice can free the minds of the incarcerated, so too can well-conceived, culturally responsive approaches be “an axe for the frozen sea within us” (2005, p. xiii).

**Purpose of Study**

This study, led by the first author, is part of a large-scale, whole-school longitudinal project located in one primary school in the Bahamas. The overarching goal of the project is to foster the development of dialogic communities in schools through culturally responsive pedagogies in literacy (Tinker Sachs, 2014b). The current investigation took place in the third year of the project and the purpose was to develop and field test the assessment materials to obtain baseline data and information for the future development and wide-scale use of these and other materials. This paper describes the development and use of the passages to assess students’ reading.

Our key questions are:

1. What processes and strategies support the development of culturally appropriate reading passages for learners?
2. What measures can be used to ensure the validity and reliability of the passages?
3. What did the results reveal about students’ performance in reading and what insights can be gleaned from the use of culturally appropriate assessment materials?

Caring is one of the understated foundations of teaching (Noddings, 1984). When educators choose to demonstrate an ethic of caring, it becomes evident in their academic planning and instructional decisions. Describing the traits common among educators committed to improving the educational experiences of learners disadvantaged by racial, cultural, linguistic, and socioeconomic hegemony, Ladson-Billings (1995) illustrates a portrait of a teacher with colorful strokes of personal accountability, community membership, and the desire to return something positive to a marginalized learning environment. As researchers who serve dual roles as educators, we recognize the complexities associated with creating culturally relevant materials and responsive environments. According to her study examining the challenges of conceptualizing and actualizing culturally relevant pedagogy, Young (2010) reveals that undergirding structural issues related to teachers’ cultural biases, the racist nature of American schools, and the failure to appropriately transform theory into practice all work together to present a considerable challenge for teachers who strive to create culturally relevant materials for their students. For Bahamian educators, it is the European colonial legacy, American cultural dominance and national and local socioeconomic forces that need to be addressed if the large-scale attainment of culturally responsive pedagogies is to be achieved.

Teachers must begin to realize their positions of power and privilege within the classroom. The ways teachers engage their students and their selection of curriculum materials impact how children learn. The decision to embrace the cultural diversity that permeates the learning environment is powerful in that it can invite children to become active participants during instructional activities (Ladson-Billings, 1995). On the contrary, attempts to ignore this diversity may be met with resistance and disengagement on the part of the students. For example, incorporating the interests of students in a lesson, perhaps through language or dialect they feel comfortable speaking or utilizing a genre of music with which they are familiar may yield higher levels of enthusiasm and inquisitiveness. Choosing to disregard these interests due to biases toward language and culture may hinder the learning process. Failing to be in tune with the needs and interests of students is a step in the direction of resisting culturally relevant pedagogy. Indeed, teachers work from a position of power and privilege (Tate, 1997) as they are responsible for making decisions about what and how children learn.
The nature of schools presents a challenge to teachers as they endeavor to prepare and develop culturally relevant materials. Traditionally, the school environment is a location where power struggles between dominant (oppressive) and subordinate (oppressed) groups are likely to occur (Delpit, 1995; Tate, 1997). Economic (wealthy vs. poor/working class), linguistic (high varieties and registers of English vs. low varieties and registers of English), racial (white vs. people of color), and gender (male vs. female) biases impact the educational enterprise. In an environment where students are expected to meet the learning and living standards set forth by largely white, middle-class families, teachers are under intense pressure to “school” non-white children to repress their cultural differences in order to achieve high test scores on exams that are neither produced by or for people of color. When the school structure promotes an atmosphere that academically rewards students based on skin color, class, and language, it is difficult to confront historically and structurally entrenched European colonial supremacy and privilege. It then becomes difficult to engage in culturally relevant pedagogy. In formerly colonized contexts, these issues continue to resonate as the educational systems were built upon the foundations laid by their former colonial masters (Bhabha, 1994; Césaire, 1955; Dubois, 1969). Teachers in the Bahamas face some of these challenges with creating culturally responsive materials and learning environments. Bahamian teachers have experienced high pressure with preparing students for the national Grade Level Achievement Tests (known locally as the GLAT) and not having enough time or flexibility for extending students’ learning in adopting inquiry-oriented dialogic and critical thinking practices (Tinker Sachs, 2014b). Teachers also face the added challenges of the many varieties of English spoken by their students due to their differing cultural, linguistic and socio-economic backgrounds (Childs & Wolfram, 2008; Nero, 2006).

Through our review of pertinent literature on the topic of culturally relevant pedagogy, we realized that many studies and conceptual pieces focused heavily on the racial dynamics between the teacher and student in the context of the United States (e.g. Banks & McGee Banks, 2013; Delpit, 1995; 2002; Gay, 2013; 2000; Ladson-Billings, 1995) rather than language, economic, and cultural differences that are specific to the context of the Bahamas. Saunders’ (2004) work for example, was one of the few studies that highlighted the cultural differences within the literature the author was exposed to growing up in the Bahamas. Further, he describes how he attempted to create culturally relevant pedagogy in his classroom in the Bahamas. He incorporated literature written in Bahamian dialect to support students’ comprehension. He discussed reading aloud stories about Bre Bouki and Bre Rabbi (Bahamian cultural tricksters; see for example, Glinton-Meicholas, 2014) to children and using these stories to support comprehension.

As a group of researchers committed to the principles of culturally relevant pedagogy, our efforts to design appropriate materials in literacy were challenging as we could not presume to know or to be able to identify the students’ interests. While our racial identities permitted some level of common experience, our diverse nationalities also presented a challenge in working with materials that are culturally appropriate for Bahamian learners. It is significant for educators and researchers to acknowledge the complexity of learners of African descent, particularly within the United States, which has a large multicultural population. People of African descent form the majority racial group in the Bahamas yet even within this group there is significant diversity in relation to ethnicity, class, nationality, language and region. Therefore, practitioners cannot assume that any implemented culturally responsive pedagogies will be sufficient for all African-descended learners in the United States, Bahamas or other places. Code (1993) frames this epistemologically by stating, “knowers are always somewhere—and at once limited and enabled by the specificities of their locations” (p. 39). For educators in the Bahamas and in the wider Caribbean, there is also a concern. Not all children are of African descent and those of African descent and skin colors may have come originally from different countries, socio-economic and linguistic groups. In the Bahamas, some areas, settlements, islands and cays are inhabited predominantly by White Bahamians, White expatriates and Black Haitian Bahamians, as, for example, in settlements at Elbow Cay, Abaco or Spanish Wells (Bahamas Dept. of Statistics, 2013). There is no such thing as one culture and all multicultural groups draw on different “funds of knowledge” which are those “historically developed and accumulated strategies (skills, abilities, ideas and practices) or bodies of knowledge that are essential to a household’s functioning and well-being” (González et al., 2005, p. 91-92). Further, as researchers, we could not
assume cultural membership within the students’ community. Therefore, we also had to acknowledge our experience and how it may not be aligned to the students’ in such areas as interests, residence, age, and background knowledge. Despite the challenges of the aforementioned, it is essential to note our shared identities with the young Bahamian school children and that as people of color, we are committed to the adoption of culturally responsive pedagogies and assessments in literacy.

Drawing on the cultural understandings of our team member born and bred in the Bahamas and who identifies as Bahamian, reading passages were constructed which referenced sights, cities, events and attractions that we hoped would be familiar to our participants. For example, one passage discusses a family’s memories around a massive sapodilla, a tree native to the tropics. In another, a child visits North Eleuthera, one of the districts of the Bahamas on the island of Eleuthera.

There is a significant gap in the literature regarding the development of culturally relevant assessment in the United States and in particular, for students from countries in the Caribbean. The small body of research that exists will be addressed (Cazden, 2001; Cunningham, 1976; Delpit, 1995; Hall-Campbell, 2011). According to Delpit (1995) children who speak non-mainstream varieties of English do have a more difficult time becoming proficient readers based on inadequate assessments, which are influenced by the dialect variety children speak. Teachers may confuse the teaching of reading with the teaching of a dialect variation. For instance, a study conducted by Cunningham (1976) concluded that teachers across the United States were often marking reading miscues that were dialect related. The extent to which this marking occurs in the Bahamas is unknown due to inadequate research.

Schools are filled with a unique blend of diversities. Addressing these diversities is essential to delivering the appropriate assessment. Nonetheless, teachers who do not address diversity can construct ethnic bias and inaccurate results. For instance, in a research study, children’s topic-centered and episodic narratives were mimicked to five African American and seven Caucasian graduate students of education (Cazden, 2001). The episodic narratives which reflect structures of African American dialect were labeled by the Caucasian informants as hard to follow, terrible stories, and incoherent. Yet, the African American informants found the episodic stories easy to understand, interesting, and full of detail and description. Subsequently, Cazden questions, “Why these differences?” (2001, p. 19). Thus, she advocated more research that employs authentic materials to measure students’ knowledge and skills. Further, she insisted that high-stakes testing environments are common in schools and are detrimental to student progress and learning. Cazden suggested socio-cultural approaches to improve classroom discourse and student learning, fewer prescribed curriculums and more authentic lessons derived from student input.

Hall-Campbell is the only known Bahamian work on developing culturally responsive psychometric measures. Hall-Campbell’s doctoral dissertation set out to define culturally relevant pedagogy, develop culturally responsive scenarios that are reflective of Bahamian pedagogy, and to examine constructs of school climate, culturally relevant outcome expectancy and culturally relevant teaching efficacy (2011, p. 48).

Hall-Campbell believes that school climate is a factor that affects teachers’ pedagogy and student success. She employed a mixed-methods approach to test the efficacy of her theories through three data-gathering phases. In the first phase she interviewed prominent Bahamian educators and secondary school teachers from three schools and four subject areas and from these interviews she went on in phase two to develop four teaching scenarios to test the relationship between school climate and culturally relevant pedagogy. In the final phase of the investigation, 226 newly recruited government school teachers and administrators were then given demographic questionnaires, Bahamian classroom scenarios and questionnaires on school climate and culturally responsive pedagogy (p. 57). Hall-Campbell found four themes related to culturally relevant pedagogy for Bahamians: cultural knowing, designing culturally relevant curriculum, acknowledging cultural differences and minimizing cultural incongruence (p. 99). The results of the first two phases showed that “there is indeed a pedagogy that is uniquely Bahamian and this pedagogy is enacted in ways
shaped by the Bahamian context” (p. 103). In the third phase of the study, after establishing the validity and reliability of the subscales for the research, the author found that “school climate was established as a significant predictor of all the culturally responsive scales” (p. 109). This means that when teachers felt more efficacious and open to teaching in pedagogically relevant ways, the more open and better the school climate.

While there are numerous challenges to creating culturally responsive texts and local assessments in the Bahamas, it is important to state that today there are Bahamian texts in existence in Bahamian schools. These texts can be found in the teaching of the language arts at the primary level, for example, the series, *Preserving Our Heritage* (Jack, 2004) and at the secondary level, for example, *More Talkin’ Bahamian* (Glinton-Meicholas, 1995); *An Evening in Guanima: A Treasury of Folktales from the Bahamas* (Glinton-Meicholas, 2014) and in social studies, for example, *Sources of Bahamian History* (Cash et al., 1991). National assessments continue to be enriched with Bahamian cultural content such as evidenced in the primary school GLAT and at the secondary level Bahamas Junior Certificate of Education and Bahamas General Certificate of Secondary Education exams (Bahamas Ministry of Education, 2010). However, the move away from Euro-British and American culturally-centered texts has not been obvious in the classroom-level literacy assessments under discussion.

**Methodology**

The first author wrote the passages for the assessment by drawing on her deep knowledge and constant engagement with family members, friends, teachers and students who reside in the Bahamas. Her observations, experiences and photographs of local life when visiting and travelling about the country assisted in the creation of the texts. The latter were tempered by her many years as an instructor of literacy and were all narrative in structure. A total of 20 passages were created for primary Grades 1 to 6.

The three doctoral students on this project completed the readability assignments, developed the questions and prepared the passages for use. When we initially began studying students’ readability with regard to culturally relevant pedagogy, as educators and doctoral students, we were familiar with the terms. As early childhood educators, we have all determined, more informally than formally, the readability of a text before allowing our students to read or peruse books and other reading materials. Leveled readers are typical components of the classroom. Rarely as teachers, however, were we called upon to assign a formal readability level to any text. Books and leveled readers that line our classroom libraries are pre-labeled by the distributor, publisher, or school district for teachers to easily select reading material for learners or for children to choose books on their level with a good balance of challenge and ease. Educators seek to provide reading materials which will enrich and encourage students’ comprehension, oral, and literacy skills. By categorizing or assigning a level to various texts, educators engage students in the responsibility of selecting texts that meet their reading level. In doing so, we hope learners spend less time with simple, unchallenging reading materials as well as more difficult, frustrating text. Rather, the goal is for students to spend more time with rich, interactive text.

With this in mind, there were plenty of factors that we needed to consider while assigning the reading levels. Some of the questions included: How do we simplify the text without losing the language and flow of the writing? Which readability formula will be used? How can we ensure that the stories for each grade level were using a similar structure and readability level?

There are various ways researchers can choose to analyze texts within their studies. Depending on the research question, the nature of the study and context, a researcher may determine the best way to approach answering the research question. A researcher may adopt a constructivist approach, which will require a more interpretative analysis. For instance, a researcher may use *textual discursive analysis*, which examines the linguistic elements and phrasing in a text. Specifically, textual discursive analysis looks at the grammatical structure, word attribution and coded language within a text. A researcher may also choose to adopt literary analytic methods, which looks more
specifically at the layout of the text. Literary analytic method is also ideal for analyzing contemporary realistic fiction. Specifically, a researcher could examine the plot, character and thematic development of a text.

Researchers are increasingly using more computer-assisted programs for research analysis of texts. While quantitative researchers using computer-assisted programs can readily cut and paste data, sort information, classify and search for common themes, the qualitative researcher would need to include additional analysis. Ezzy cautions, “qualitative data analysis cannot be done by a computer” (2002, p. 111). Rather the computer program operates as a facilitator. Therefore, one benefit is that the program can identify patterns and common themes; however, the programs fall short of interpretation of the data (Ezzy, 2002). However, if there is a word, phrase or idea to be analyzed, a computer program may be used. The computer can count the text for occurrence or frequency of specific words and phrases.

Textalyser is one contemporary electronic analysis tool researchers can use to examine the texts in their reports (www.textalyser.net). The online program is accessible to students, teachers and researchers. The program can determine the subject of a text, aid with translation, and analyze word choice. The program may also be used to determine key word density and prominence of certain words used in the text.

Using our experience as early childhood educators who specialize in reading instruction and work with leveled texts, we determined what a particular grade level text should look like. This includes, for example, the understanding that Grade 2 texts would have more complex words than kindergarten texts. Further, Grade 2 texts would include more compound words or significantly longer words with prefixes and suffixes. We recognized that although there were multisyllabic words, we would not allow these to affect the readability of the text. For example, computer, a multisyllabic word, is common and familiar in Grade 2 texts and therefore did not necessarily increase the readability level.

In order to measure the level of complexity of each short passage, we turned to the Spache (1953), Flesch (1948), and Dale and Chall (1948) readability formulas. By comparing the results of each measure, we were able to determine the appropriate grade level to assign to each text. While these formulas generally yielded similar outcomes, there were occasional outliers that could be explained. For example, if measures suggested the readability of a passage be near the fourth grade level, yet one indicated that readability was closer to the seventh grade level, we considered proper nouns and multisyllabic words which may have thwarted the scale along with our own levels of expertise as reading specialists and early childhood educators with years of teaching experience and background in children’s literature. Adjusting our levels accordingly, we recognized that each formula was created for a particular group of reading levels. For example, the Spache readability formula is ideally suited for passages near or below the third grade reading level (primary), while the Dale-Chall method is particularly useful for advanced text.

The use of readability formulas leaves room for error and faulty reading levels (Rush, 1985). Their limitations compelled us to consider issues of how meaning is communicated, reader interests, experience, knowledge, and motivation for reading. Arguing that formulas only focus on the surface of the text, Kazemek (1984) suggested that consideration must be given to the background knowledge and language of the reader prior to making decisions about reading levels. Further, teachers should engage in dialogue with students and observe them reading in various contexts to determine which texts are most suitable.

Created in 1953, the Spache readability formula was introduced to establish the reading level for primary text, that is third grade and below. To manually determine the Spache readability formula, we selected 100 words from a passage we believed to be the least challenging text. We then counted the number of sentences within the sample text and divided that figure by the total number of words in the selected sample to determine the average sentence length (ASL). This figure also provided the
percentage of difficult words (PDW). The text’s readability level was established by plugging our figures into the Spache Readability Index formula \(((0.142 \times ASL) + (0.086 \times PDW) + 0.839)\).

Created by Rudolph Flesch in 1948, the Flesch readability formula was introduced to establish the reading level for school-related texts. However, it has been used widely by various agencies to assess the difficulty of any reading passage. The measurement scale is between zero and 100 with scores closer to zero regarded as extremely complex and results near 100 as uncomplicated. To employ the Flesch readability formula, we began by applying a mathematical formula of \(206.835 - (1.015 \times ASL) - (84.6 \times ASW)\). The outcome yields the passages’ reading ease.

Finally, we used the Dale-Chall Readability formula to assess the reading level for passages near or above a fourth grade level. Edgar Dale and Jeanne Chall created the Dale-Chall formula to improve Flesch’s formula; it offers leveling for adult text. Unlike other formulas that consider word length, the Dale-Chall (1948) bases reading ease on the number of complex words, or words that do not appear on grade-level sight-word lists. To utilize this formula, we selected a text sample of 100+ words. We then calculated the ASL and the percentage of words that do not appear on sight-word lists, or PDW. We plugged those figures into the equation: \(0.1579 \times PDW + 0.0496 \times ASL + 3.6365\) to ascertain the passage’s raw score. The higher the raw score, the higher the grade level for each text. For example, a text with a raw score of 7.5 would be a ninth or tenth grade reading. Table 1 gives the titles and word counts of the passages and their assigned reading levels.

The design and creation of comprehension questions were an important part of the development process. Questions were categorized as factual, sequential, vocabulary, inferential and personal response following work done by Tinker Sachs and Mahon (2006) to allow students a range of question types. The questions went through several rounds of development by the research team and were checked and counter-checked for accuracy of question type and appropriateness for the text.

### Table 1. Story Title, Grade Level and Word Count

<table>
<thead>
<tr>
<th>Story Title</th>
<th>Grade Level</th>
<th>Word Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 My Ball</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>2 My Birthday</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>3 My Pet</td>
<td>2</td>
<td>55</td>
</tr>
<tr>
<td>4 My Boat</td>
<td>2</td>
<td>70</td>
</tr>
<tr>
<td>5 My School</td>
<td>2</td>
<td>93</td>
</tr>
<tr>
<td>6 A Rainy Day</td>
<td>2</td>
<td>102</td>
</tr>
<tr>
<td>7 A Day at the Beach</td>
<td>2</td>
<td>185</td>
</tr>
<tr>
<td>8 Saturday Evening</td>
<td>3</td>
<td>241</td>
</tr>
<tr>
<td>9 Peanut Man</td>
<td>3</td>
<td>175</td>
</tr>
<tr>
<td>10 The Fruit Stand</td>
<td>3</td>
<td>137</td>
</tr>
<tr>
<td>11 Where I live</td>
<td>3</td>
<td>188</td>
</tr>
<tr>
<td>12 Tourist</td>
<td>4</td>
<td>204</td>
</tr>
<tr>
<td>13 The New School Year</td>
<td>4</td>
<td>256</td>
</tr>
<tr>
<td>14 The Cookout</td>
<td>4</td>
<td>320</td>
</tr>
<tr>
<td>15 A Jitney Ride to the Beach</td>
<td>5</td>
<td>411</td>
</tr>
<tr>
<td>16 A Ferry Ride to North Eleuthera</td>
<td>5</td>
<td>415</td>
</tr>
<tr>
<td>17 The Christening</td>
<td>6</td>
<td>193</td>
</tr>
<tr>
<td>18 A Visit to Crooked Island</td>
<td>6</td>
<td>281</td>
</tr>
<tr>
<td>19 The Dog Show</td>
<td>6</td>
<td>270</td>
</tr>
<tr>
<td>20 The Dilly Tree</td>
<td>7</td>
<td>282</td>
</tr>
</tbody>
</table>

In formulating the presentation of the texts to our young participants, we chose to include pictures to match the context of the passages, to build schema and to support their background knowledge. Enlarging font sizes for students, we deemed, made it easier to read. For the examiner, we included introductory statements that we believed were essential for young readers to hear in order
to comprehend the instructions for the assignment. On the examiner’s copy, we chose to include space for comments and reflections on areas such as retellings, miscues, self-corrections, re-readings, omissions, substitutions, and other reading-related behaviors.

This pre-planning stage of data collection included several steps. First, we enlarged the font size of the student copy of the transcripts to ensure that students could read the script easily. Transcripts are the actual sheets with the stories and pictures that the students read from. We copied three sets of each student set and bound them in transparent report folders. Since there would be two researchers assessing students at a given time, we wanted to ensure that with extra copies we could work more efficiently. Then we copied about twenty examiner copies of each story. The examiner copy included each story with the directions at the front of the sheet to be read to students before beginning. Retelling prompts and comprehension questions were at the back of the examiner copy. We wanted to have sufficient transcripts in case we needed to test the students higher or lower. Students who read stories at a frustration or difficulty level would need a lower level story and those who could easily read a story independently would be given a more challenging story at a grade level higher. For students who had difficulty with the grade one text, we asked them to tell us about the picture.

Before collecting the data, we created a coding system to provide accurate tracking of each student. Merriam posited, “… the validity and reliability of a study depend upon the ethics of the investigator” (2009, p. 228). She further stated, “… by establishing basic descriptive categories early on for coding, the researcher will have easy access to information in the analysis and interpretation stage” (p. 152). The characteristics we used for the codes were based on the grade, each student’s teacher’s name, the gender and the student’s number placement in the class. We received a class list from each teacher within each grade and assigned every child a code within the class. The teachers had grouped their students as either low, medium, or high in reading but this information was not used in the selection of students as we randomly selected every fifth child in each class for assessment. The teacher information was used at the end of the school data collection period to see if there was a match between the researchers’ and teachers’ grade level association.

The students were assessed at the beginning of the last month in the school year just before final exams in June 2011. The testing session lasted approximately 10-20 minutes depending on the pupil. We chose particular days to test specific grades. The morning of the first day, one researcher assessed fourth graders and in the afternoon both researchers randomly assessed the fifth graders. On the second day of testing, we assessed some second and all third graders in the morning followed by some sixth graders after lunch in the afternoon. On the third day, we assessed the remaining sixth and second graders. On the fourth and final day, we tested the first graders all morning. The rationale behind the order of grades to assess rested on the closing events that were happening at the time at the school such as the end-of-year assessments and the upcoming graduation for sixth graders.

The assessment took place in the teachers’ staff room and a researcher assessed individual students. On arriving in the staff room, the student was allowed to examine three or four texts that were at, above and below his or her grade level. The student then selected one text to read and was asked to practice reading it before being assessed. The instructions were then read to the child and then the assessment began. A sample of the student copy is shown in Figure 1.

The researcher had the student sit beside her as s/he read the first story. If a student could read that particular story successfully or independently, then the student was given the more challenging text or above grade level text to read. However, if the student had difficulty decoding the words, and was unable to answer 80% of the questions, the researcher had the student read a story from a lower grade level.
The Fruit Stand

Mrs. Cooper has a fruit stand near our school. On Fridays when my Daddy is driving me home from school, he likes to stop there and buy fruit. I usually stay in the car looking out at the variety of things Mrs. Cooper has to sell. She has everything nicely displayed. I could see red ripe tomatoes, big yellow oranges, green and purple grapes, yellow hairy mangoes and the big green mangoes, my favourite. Daddy liked to buy her tomatoes and pears when they were in season.

Figure 1. Sample of student copy with picture.

Before testing, both researchers decided on the criteria for determining reading accuracy for a level of frustration (hard), instructional or independent (easy) reading level. See Figure 2.

<table>
<thead>
<tr>
<th>Comprehension Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/5- Independent/ with 95% decoding</td>
</tr>
<tr>
<td>4/5 – Instructional/ with 90-94% decoding</td>
</tr>
<tr>
<td>3/5- Frustration below 90% decoding OR 100% decoding and below 4/5 comprehension</td>
</tr>
</tbody>
</table>

Figure 2. Criteria for determining reading accuracy

Because this study is a preliminary field-testing of the texts, we wanted to ensure that procedures were being developed and followed so that in future investigations, the design and procedures could be improved. We also wanted to create a study in which we “made as many steps as operational as possible” (Yin, 2009, p. 45).

Figure 3 shows an example of an excerpt of an actual direction that researchers read to the students. After students read the story aloud, they were then asked to give an oral retelling of the story. The oral retelling was necessary to gather a sense of students’ comprehension through recall of the details of the story. A student who gave a few details was recorded as giving minimal retelling. A student could also receive partial or complete retelling, if s/he gave most or all of the main ideas, retold coherently and used specific vocabulary from the story. Finally, students were asked to answer five comprehension questions about the story.

Where I Live

Examiner Says: This is a story about a group of children playing outside in their backyard. First, I need you to read the story silently. Then I need you to read the story aloud. Finally, I need you to retell the story. After which, I need you to answer some questions about the story.

Mum was hanging clothes in the backyard. I was playing cowboys and crooks with my brothers. Our sister wanted to play too but we would not let her. Mum had two big tubs on the wash
stand and she washed our school clothes in one and rinsed them in the other. I was the cowboy and my two brothers were the crooks. I had to catch them and carry them to jail.

**Figure 3.** Sample of an excerpt of examiner’s copy.

After determining students’ reading level based on the criteria mentioned above, the researchers decided if students should be tested above or below the initial level. We kept a running inventory of all data collected to ensure validity of the study. As part of the data collection process, students were also tape recorded as they read each of the stories. Each student transcript as well as the tape recordings would be used later as part of the data analysis process.

Merriam posits, “Simultaneous data collection and analysis occurs both in and out of the field. That is, you can be doing some rudimentary analysis while you are in the process of collecting data, as well as between data collection activities” (2009, p. 171). To that end, one of the doctoral researchers scored the transcripts each day and wrote up a complete analysis of an individual student’s reading behavior. Further, notes were written officially on the transcript of specific reading behaviors such as self-correcting, rereading, stretching sounds or reading with fluency. She also prepared a partial analysis of each student’s reading level specific to the ability to decode, retell and comprehend questions. Using 3 x 5 cards, she recorded the levels for each child in each class. These cards were then stapled together and used by the senior researcher to do a more comprehensive report and cross analysis of each grade. Before leaving the school, the two researchers met with some of the teachers and shared their general findings about their individual classes. They also discussed the preliminary report with four administrators about the students’ performance. The results were later reported to the school’s faculty in professional development follow-up work.

**Results**

The results echoed and verified the teachers’ categorization of their students’ general performance in reading and were roughly confirmed by students’ performance on the country’s standardized GLAT annually administered by the Ministry of Education. Table 2 shows the distribution of the students by grade level and their overall reading performance in reading aloud, reading comprehension and retelling. An estimated 21% (n = 37) of the total school’s population (n = 367) were randomly selected and assessed and of that number 37% (n = 30) were below grade level while 31% (n = 25) were at or above grade level. The results clearly indicate a strong need for the development of intervention programs for all grade levels across the school. Table 2 gives the breakdown.

<table>
<thead>
<tr>
<th>Table 2 Students’ Overall Reading Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

*Non readers

Bahamian researcher, Saunders (2004) found that although he incorporated culturally relevant texts in his instruction, his Grades 1-4 students did not show improvement in their comprehension. The results of this study as well as Saunders’ help to explain why it is that despite exposure to
culturally relevant texts, students were not as successful in reading as would be anticipated. The preliminary findings clearly show that reading culturally relevant text does not mean that one will necessarily be a better reader. Moreover, not all students within a culture are exposed to similar experiences. Not all parents can afford to expose their children to trips and rich cultural experiences.

The second level of students’ reading was the miscue analyses that gave us an idea of the types and frequency of students’ miscues. Another important reason for the miscue analysis was to examine the extent to which students’ dialect variety influenced the processing of text. Before the analyses of the miscues, researchers worked together to establish inter-rater agreement on the coding of the passages. Data from six of the students (approximately 7% of the data) were randomly selected for coding by the research team. Agreement was subsequently established at .88.

We report here a sample of the findings from the students by zeroing in on the dominant types of miscues. Miscues were coded as omissions, substitutions, repetitions and insertions. They were also coded to indicate the influence of dialect variety and whether or not meaning was impacted. Students’ omissions, substitutions, repetitions and insertions indicated an association with Bahamian linguistic speech patterns but these miscues did not exert a negative influence on the comprehension of the text. In several examples, we can see the use of the verb form impacted by Bahamian linguistic patterns. For example: the target met became meet; took became take; became was changed to come and seemed became seems (Grade 6 readers). Table 3 gives more examples of these phenomena in the reading of text.

Here is an excerpt from one fifth grade reader who is struggling with a second grade level text, A Day at the Beach. Miscues are italicized and underlined while the target word is emboldened in parentheses.

Table 3 A Day at the Beach

<table>
<thead>
<tr>
<th>Text and Miscues</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>We went to the beach today. I was so happy. I put on my bathing suit and got my tool [towel] with the boats on it. I went to look for my beach basket [bucket] and shard [self-corrected - shovel] but I could not find them. I find [found] my beach ball under my bed. I asked my brother to blow it up for me. Then my parents said it was time to go. My brother [brothers] and I raced to the car. When we got there, my mother surprise [spread] a sheet on the sand. Daddy took the cooler self corrected out. We run [ran] into the water.</td>
<td>“Tool” for “Towel” - The student read the initial and final letters but failed to process the lack of fit with the context. “Basket” for “Bucket” – This is a semantically appropriate match with both initial and final consonants being correctly read. “Find” for “Found” – This miscue could be linguistically based as Bahamian dialect speakers often use the present tense as the past tense marker and rely on context to signify tense. “Brother” for “Brothers” – miscue is a deletion of the plural marker and may be linguistically based as the plural noun is often not used but qualified by contextual markers. “Surprise” for “Spread” – In this reading the student got only the initial letter match and guessed the remainder of the word without checking for comprehension match. “Run” for “Ran” – This miscue is linguistically based as the present tense is used often to denote the past.</td>
</tr>
</tbody>
</table>

Other miscues indicated students’ need for word recognition strengthening which the overarching results support.

**Discussion**

In responding to the research questions underpinning this paper, it is clear that the construction of culturally appropriate assessments in literacy is not a simple construct. The creator of the text needs to have deep and intimate knowledge of the context. The writing of these texts requires, as Gay intones, “tapping into a wide range of cultural knowledge, experiences, contributions, and perspectives” (2000, p. 31). Gay believes that “Emotions, beliefs, values, ethos, opinions, and feelings
are scrutinized along with factual information to make curriculum and instruction more reflective of and responsive to ethnic diversity” (p. 31-32). The writer or materials developer needs to be immersed in the culture of the community to be able to capture the subtle nuances of its lifestyle and ways of knowing. Once the writer begins to write, s/he needs to be mindful of the audience so that s/he can construct passages in ways that will be age and content appropriate. Texts also need to be developmentally appropriate for students. As in the case of these texts, teachers were consulted on what children would like to read about and their general interests. Children can also be consulted and the texts tested on several of them for suitability prior to use. In this preliminary investigation we did not consult the children on their views of the text before or after selection. This is an area for further exploration as we continue to develop the passages.

What are valid measures or indicators of someone’s culture depends on the people who are members of that cultural group. The writer needs to have contact with members of the group to know what is of interest and importance in their lives. The usability of the texts needs to be ascertained through field testing of the passages, close note taking and examination of the students’ response to the text and the demands of the task. One way to ensure cultural validity is to consult members of the cultural group which we can do more of the next time around but reading comprehension assessment validity also means that the measures must assess what they claim to measure. In comprehension the question types went through several iterations before use to ensure that, for example, inferential questions indeed were inferential questions and agreed upon by all the researchers to be so. Reliability in assessment means that the results are confirmed if done again and again. What we did here was to get superficial confirmation of the reliability of the results by consulting teachers’ placement of their students and the GLAT results. Now the texts we used need to be validated over a period of time with similar groups of children to ensure that they are indeed reliable measures of literacy. The matches with other measures confirmed that our results were approximately in the right ballpark in being able to assess students’ reading accurately.

A final important question in this research is what can the provision of culturally familiar texts reveal about students’ reading performance and what insights might be gleaned from the use of culturally appropriate assessment materials. Tinker’s (1989) dissertation addressed this question closely by giving Bahamian and Canadian sixth graders culturally familiar and unfamiliar passages to read. Using think-aloud, Tinker found that Bahamian children were able to process the culturally familiar Bahamian passage (Junkanoo) with higher levels of storying, for example associations, inferences and critical thinking, than the unfamiliar Canadian text (subway). Likewise, Canadian children were able to do the same on their culturally familiar (subway) and unfamiliar (Junkanoo) passages. In the work reported here, we do not have an experimental group to test the efficacy of our texts over other culturally un/familiar ones. However, conceptually, it stands to reason that one will generally perform at a higher level on something with which one is familiar over something with which one is unfamiliar (Anderson, 2004; Bransford, 2004). Tinker (1989) has demonstrated this view to be of merit in using culturally familiar Bahamian texts with Bahamian elementary children. However, a few studies are insufficient to establish this claim and there is clearly a need for more rigorously designed longitudinal research to fully establish the veracity of the claim that using culturally responsive texts will result in greater student learning and overall achievement. Needless to say, it would certainly appear that culturally responsive teaching is a major step in the direction of stronger teaching and learning. Gay puts it this way:

Culturally responsive teaching: simultaneously develops, along with academic achievement, social consciousness and critique; cultural affirmation, competence, and exchange; … individual self-worth and abilities; and an ethic of caring. It uses [different] ways of knowing, understanding, and representing various ethnic and cultural groups in teaching academic subjects, processes, and skills. It cultivates cooperation, collaboration, reciprocity, and mutual responsibility for learning among students, and between students and teachers. It incorporates high-status, cultural knowledge about different ethnic groups in all subjects and skills taught. … Thus, [it] validates, facilitates, liberates, and empowers
ethnically diverse students by … cultivating their cultural integrity, individual abilities, and academic success. (2010, pp. 45-46)

In general, these passages appear to be a useful foundation for further development. The results indicated that the passages were reliable in ascertaining students’ reading levels through matching teachers’ ranking of the students and their performance on standardized measures. However, the passages all need to be more closely scrutinized for consistency in text structure, levels of interest and familiarity, variation in word length and quality of questions asked. Further and more detailed analyses would need to be done on students’ responsiveness to question topics and retellings. It would also be important to gather students’ views on the texts’ themes and topics for further input and refinement. Larger scale measures also need to be developed over time to investigate the extent to which culturally responsive pedagogies support improved academic performance. In addition to the aforementioned areas, this work is very much hampered by lack of funding to invest in the creation and field-testing of culturally responsive texts. Such a task should be a major and important national undertaking if the Bahamas wants to truly divest itself of the many hampering vestiges of colonialism in its educational system. Teacher professional development is a great necessity as part of the campaign to take on culturally responsive pedagogies (Sleeter, 2011; Tinker Sachs, 2014b).

No information texts were included in the development of these culturally responsive materials. There is a great need to create this text type and balance the genres that are given to the students for both instructional and assessment purposes. Further development is needed if this project is to be taken to the next level and this means more time to construct and field test the materials before they can be used for large scale or school and systems-wide assessment. Does the use of culturally appropriate assessment materials really make a difference for learners? Research designed along the lines of Tinker (1984; 1989) would need to be developed to test the efficacy of this claim in both assessment and instructional conditions with culturally familiar and unfamiliar materials. Intuitively, we know it makes sense to give learners materials with which they are culturally familiar to reinforce and affirm their identities, develop their personalities and optimize their foundations for learning new things based on their own experiences and those who care about them. Thus we close with the following broad recommendations for supporting the development of culturally responsive pedagogies in the Bahamas and beyond:

1. Colleges of Education and institutions that support the professional development of teachers need to ensure that pre-service and in-service teachers are schooled in the understanding of critical and transformative culturally responsive pedagogical practices;

2. Administrators, school personnel and teachers should be encouraged and affirmed in supporting and adopting culturally responsive pedagogies and assessments in their schools and classrooms;

3. Governments and agencies that provide sources of funding for education need to offer grants that support the professionalization of teachers in the adoption of culturally responsive pedagogies and the writing and development of culturally responsive texts and assessments;

4. Educational researchers need to be funded to investigate the long-term adoption and development of local, culturally appropriate pedagogies and assessments.

Souto-Manning helps us with the following challenge in education:

… the challenge of education is to consider access, equity, and power and embrace liberatory transformative practices. The challenge is then not to create master texts or intense experiences, but to develop (or adapt) pedagogical processes which can honor situated contexts and promote authentic forums for problematization, dialogue and transformation (2010, p. 97).
Ultimately, the strong adoption of pedagogies and assessments that are culturally responsive is about helping both teachers and students to “develop a critical consciousness through which they challenge the status quo of the current social order” (Ladson-Billings, 1995 p. 160).

Acknowledgements

The authors wish to express their sincere thanks to all reviewers for this paper. We also acknowledge the ongoing support of the administrators, teachers, students and parents of Bahamas Primary School in Nassau, Bahamas.

References


