#### BEYOND A FOCUS ON TEXTBOOKS:

# NEGOTIATING ENGLISH LANGUAGE AND PHYSICS GENDERED TEXTBOOK CONSTRUCTIONS IN UGANDAN SECONDARY SCHOOL CLASSROOMS

by

Lydia Namatende-Sakwa

**Dissertation Committee:** 

Professor Nancy Lesko, Sponsor Professor Michelle Knight-Manuel

Approved by the Committee on the Degree of Doctor of Education

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#### **ABSTRACT**

#### BEYOND A FOCUS ON TEXTBOOKS:

# NEGOTIATING ENGLISH LANGUAGE AND PHYSICS GENDERED TEXTBOOK CONSTRUCTIONS IN UGANDAN SECONDARY SCHOOL CLASSROOMS

### Lydia Namatende-Sakwa

This study exceeded the dominant focus on textbooks to include teacher and student classroom engagements with them. It was guided by three research questions: i) In what ways might English and physics textbooks in Ugandan secondary schools construct gender? ii) How do teachers use gendered texts in the classroom? What discourses and practices circulate within teacher and student "formal" classroom interactions around gendered texts? iii) In what ways do teachers and students respond to gendered constructions within their school textbooks? What discourses and practices are cited in their responses?

Informed by a feminist post-structural framework, I made use of a qualitative case study approach, with documentary analysis, classroom observations, and in-depth as well as group interviews with teachers and students respectively, to tap into discursive resources that informed negotiation of gender as constructed in English and physics

textbooks in two diverse school sites in Uganda. The data analysis was undertaken using feminist post-structural discourse analysis and reflexivity.

My findings revealed firstly, that while gender as constructed in English textbooks has shifted from invisibility of women to their marginalization, gender as constructed in physics textbooks continues to privilege a masculine image. Secondly, contrary to teachers' claims, their text selection and use was implicitly informed by gendered essentialist assumptions. Thirdly, teachers and students did not passively take up gendered images as produced in their textbooks. Rather, they weighed these against their own understandings, based on which they took up and/or resisted them. As such, fixing textbooks with more "progressive" gendered images did not guarantee their legitimation.

The study provides insights into considerations for constructing gender in textbooks. It also dislodges pervasive assumptions regarding gender as a concern of the text rather than its readers, demonstrating that teachers and students in fact, bring their gendered, sexed, raced, classed lenses as filters against which gendered texts are taken up and/or rejected. The study contributes to the paucity of work on classroom engagements with gendered texts, student perspectives regarding these texts, gender arrangements within African science classrooms. It illuminates how discourses are networked, tapping into discursive resources that inform negotiation of gendered textbooks.

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### **DEDICATION**

## To God be the glory!

To my husband and best friend, Andrew Darlington Sakwa, a great pillar.

My children, George Samuel Masibo, Gabriella Eva Buteme, and Gail Marie Watera, the joys of my life!

Mum, Eva Aliyinza and Dad, George Tasiwuuka Mwandha, for believing in me.

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#### Chapter I

#### PROBLEMATIZING A FOCUS ON TEXTBOOKS

Struggles surrounding curriculum content have been attributed to the strife for power to define a worldview to be transmitted to the young, for the purpose of either gaining or holding on to power (Apple, 1990; Apple, 2004; Apple & Christian-Smith, 1991; Christian-Smith, 1991). Such symbolic representations of a worldview in the curriculum, usually produced and controlled by dominant groups, are often used to legitimate their status, naturalize socially constructed relations, and project subjective interpretations of reality as factual (Sleeter & Grant, 1991). In this context, the textbook has been marked "the major conveyor of the curriculum" and in that role, according to Apple (as cited in Sleeter & Grant, 1991), "establishes so much of the material conditions for teaching and learning in classrooms in many countries throughout the world, and . . . often defines what is elite and legitimate culture to pass on" (p. 80). As such, school textbooks continue to dominate as curricular tools constituting a foundation for much of the instruction in schools (Kuzmic, 2000; Pawelczyk, Pakula, & Sunderland, 2014; Woodya, Danielb, & Bakera, 2010).

Yet, textbooks have also been problematized for their complicity in constructing gender in ways that denigrate women (Hellinger, 1980; Lee, 2014; Lee & Collins, 2009; Porecca, 1984; Taylor, 1979). Textbook studies have valuably revealed an

overrepresentation of males in a greater range of more powerful occupational roles, while females have been prevalently constructed as second-place and the butt of jokes and assigned stereotypical roles and reactions (Ansary & Babaii, 2003; Barton & Sakwa, 2012b; Hartman & Judd, 1978; Holmvist & Gjorup, 2007; Lee & Collins, 2009a; Lee, 2014; Lee & Collins, 2008; Peterson & Kronet, 1992; Rifkin, 1998; Zittleman & Sadker, 2002). While such analyses have been crucial in illuminating, deconstructing, and/or troubling what might appear as innocent depoliticized discourses, I argue that *solely* examining the text in this way ignores the interpretive community—that is, the *reader* (in this case, predominantly teachers and students)—and how they take up the text in question.

Implicit in the sole focus on textbooks is the idea that students and teachers are uncritical readers, more likely to take up textbook messages without question. Using this logic, therefore, textbooks *must* be "fixed" so that they do not "mislead" readers. This logic disregards readers' own gendered truths, which in my study, were sometimes incongruent with gendered constructions within the text. Rather than passively take up such "misleading" constructions, the teachers and students in this study weighed them against their own truths, rejecting and/or ignoring gendered constructions that were incongruent with their own beliefs. Also implied in the focus on texts alone is that fixing them necessarily fixes the ways that readers make sense of them, making it possible for students and teachers to interpret texts in the *one* way intended by the author. This is based on the assumption that meaning is intrinsic to the text, disregarding, as revealed by this study, that textual meaning and/or interpretation is contingent upon context as well as readers' gendered "truths." The idea of fixing the text overlooks the notion that texts are

imbued with multiple meanings that shift, overlap, and/or contradict (Baxter, 2003; Connell, 2008). The construction of gender is then posited as a concern of the text and not its readers, overlooking the idea that teachers and students are socially and politically invested, and that these investments shape their interpretation of gender as constructed in texts. Indeed, a large body of scholarship corroborates this study in demonstrating that many teachers generally operate with gendered preconceptions about women and men, which shape their classroom practice (Almutawa, 2005; Ayodeji, 2010; Ezati, 2007; Sanders, 2000; Sanders, 2002; Skelton, 2007).

The overriding research focus on textbooks within previous studies was also undergirded by the idea that gender equality can be attained in the classroom through making texts more "progressive" in their construction of gender. This overlooked the idea that in less privileged settings like most Ugandan classrooms, particularly less affluent schools as revealed by my study, textbooks were rarely replaced. Teachers and students in such contexts continued to use older versions because of paucity of resources to replace these with what may be deemed more progressive texts. As such, while textbooks may not change much, especially in certain contexts, they *do* change hands among teachers and students whose interpretations are contingent upon their knowledge(s) and experiences of gender. This explains why it is imperative to go beyond the text in order to also focus on teacher-student discursive resources, in order to inform teacher education.

Most importantly, the overriding focus on fixing textbooks overlooks the ways in which teachers and students may appropriate textual meaning. Sunderland, Cowley, Rahim, and Shattuck (2001b) convincingly argue that textbooks depicting "progressive" representations of gender can be taught in ways that undermine them. Likewise, gender-

biased textbooks can be taught in ways that challenge the biases. This was corroborated in my study when the teachers undermined the progressive/trangressive gendered constructions in the textbooks, by rejecting or ignoring them during the lesson. Therefore, as well articulated by Coffey and Delamont (2000), "an increase in women's names mentioned and in pictures of women in texts does not in and of itself fundamentally challenge the taken-for-granted knowledge base" (p. 35). It is therefore imperative that research also focuses on how to engage with this "knowledge base," which informs the engagements around texts in the classroom, as a way to inform teacher education in Uganda meaningfully. Indeed, Loewen (1995) affirmed that the predominant focus on texts alone has "had little impact on classroom practice" (as cited in Kuzmic, 2000, p. 108).

My study demonstrates that while fixing textbooks to include counter-stereotypes (Francis, 1998) is indeed important, the ways in which teachers and students take these up is unpredictable. Both teachers and students drew from discourses and practices in their own experiences, to support and/or counteract both traditional and non-traditional gendered textbook constructions. As affirmed by Coates (1997, as cited in Sunderland, 2004), "The range of discourses to which we have access enable us to perform different 'selves'" (p. 291 as cited in Sunderland, 2004, p. 102). In other words, any new and/or old discourses in texts are always weighed against what we already know before they are taken up and/or resisted. As such, our gender "knowledge base" informs the ways in which we take up and act on texts, regardless of how gender is constructed therein. I argue that teachers' as well as students' knowledge(s) about gender functioned as a filter and/or lens through which they engaged with gender as constructed in their textbooks. It

is this knowledge, coupled with disciplinary requirements and/or standards for particular subjects, which determined whether and/or how teachers and students challenged/rejected, ignored, and/or endorsed gendered constructions within textbooks. As well articulated by Coffey and Delamont (2000), "the teacher who 'knows' females are 'naturally' better at childcare is deploying knowledge just as much as the geography graduate using an atlas" (p. 42). These knowledge(s) about gender, therefore, nested in historically constructed ways in which women and men are seen, informed the engagement with gendered textbooks in the classroom. This suggests that de-politicizing textbooks did not necessarily de-politicize the teachers and students who read them.

Therefore, my study exceeded the dominant sole focus on gendered constructions within textbooks, to also draw attention to how teachers and students took up these constructions in the classroom. This provided insights into discursive resources/knowledge(s), which informed the ways gender as constructed within textbooks was taken up.

As such, I situated my inquiry about these discursive resources that inform consumption of gendered texts within the Foucauldian tradition of discourse studies (Butler, 1990; Foucault, 1980; Youdell, 2006). Youdell (2006) defined discourse as "bodies of knowledge that are taken as 'truth' and through which we see the world" (2006, p. 35). They function as a "regime of truth" (Foucault, 1980) that sets out, for example, what it means to be a woman or man in ways that seem natural, self-evident, the-way-things-are. Popkewitz (1998) explained that a focus on "discourse is direct attention to the intersection of multiple knowledge(s) that govern the practice of teachers" (p. 12). Therefore, given that discourses "structure the ways in which we think about things" (Paechter, 2001, p. 42), my focus on discursive practices is a useful way of

getting at teachers' and students' gendered knowledge(s), which inform how they take up and act on gendered texts.

I approached this study by illuminating the ways in which gender was constructed in selected English language and physics textbooks used in Ugandan classrooms. I then identified and/or "spotted" (Sunderland, 2004) discourses about gender that were deployed and/or enacted in teacher-student use of gendered texts. This provided insights into their gendered truths and/or knowledge base. My focus on both texts and teacher-student engagements with them dislodges predominant constructions of gender as a concern of the text, which is implicated in previous studies on textbooks (Elgar, 2004; Gupta & Yin, 1990; Holmvist & Gjorup, 2007; Lee, 2014; Porecca, 1984; Taylor, 1979; Zittleman & Sadker, 2002). This is in cognizance of a post-structural understanding of gender *not* as intrinsic to a text, but as relational and constructed through interaction in social processes (Connell, 2008; Ropers-Huilman, 1998). As affirmed by Connell (2008), "Gender involves . . . a vast and complicated institutional and cultural order. It is a whole order that comes into relation with bodies, and gives them gender meanings" (p. 39).

My study privileges gender because, in Connell's (2008) words, "it is a key dimension of personal life, social relations and culture" (p. vii). It is a category around which much of daily life is organized, and through which several people instantly identify and/or are recognized. Gender arrangements such as conventional heterosexual marriages, clothes, hairstyles, sports, and work are so familiar that they seem part of the order of nature. Connell affirmed that every institution has its own gender regime and every society has its own gender order, as well as a dominant sexual code that informs how men and women are seen, talked about, and acted on. Connell (2008) added that

"Recognizing the gender order is easy; understanding it is not" (p. 3). My study engaged with the gender order, identifying discursive resources deployed and/or enacted around gendered textbooks in the classroom.

I intentionally focused on English language and science (specifically physics) textbooks. English constitutes an important part of the school curriculum in Uganda since it is compulsory, the medium of instruction, and allocated the greatest number of hours on the school timetable. English is also a subject I taught in Uganda using some of the textbooks analyzed in this study. More importantly, English was historically constructed as a "female-friendly" subject traditionally and seen as value-laden and subjective. Physics, on the other hand, is considered the most abstract and least gender diverse of the science subjects, as it registers the fewest numbers of female students (Hazari, Tai, & Sadler, 2007; Jammula, 2015; Lorenzo, Crouch, & Mazur, 2006; Pollock, Finkelstein, & Kost, 2007). Further, Coffey and Delamont (2000) argued that while discourses of disciplines like English literature allow for debate about different gendered readings, "science and math teachers are overwhelmingly committed to a belief that their subjects are impersonal, objective and gender neutral" (p. 33). Working with English and physics textbooks, therefore, offered possibilities for examining and potentially disrupting gendered discourses and practices around textbooks in disciplinary areas, which represent claimed markers of gender difference (Paechter, 2000; Walkerdine, 1998).

Before I proceed to explain the rest of my study, I turn to some key terms that I use, which are otherwise open to a wide range of possible interpretations. I begin by explaining my understanding of "gender." Butler (2003) distinguished "between sex as biological facticity and gender as the cultural interpretation or signification of that

facticity" (p. 63). She suggested that gender is the subjective and/or social construction of what is considered male and female based on sociocultural norms and power. For example, childcare has traditionally been relegated to women, while men are considered breadwinners. Such constructions of wife/husband, private/public, and feminine/masculine create social hierarchies and unequal power relations through everyday interactions (Davis & Skilton-Sylvester, 2004). I recognize, however, that because gender is socially constructed rather than inherent, "girls/women can and do behave in 'masculine' ways, and males in 'feminine' ways" (Francis, 2006), transgressing traditional gender norms. Therefore, I studied gender not as simple differences or fixed categories, but rather as "both socially produced and variable between different forms of discourse" (Weedon, 1997, p. 22). Gender is therefore operationalized as fluid, complex, and contradictory.

While I recognize that the terms "text" and "textbook" are sometimes used synonymously (Apple, 1986), I make use of the term textbook like Sunderland et al. (2002) to refer to "whole written documents which are physical entities in themselves," while I use text to refer to "much shorter stretches of writing in the form of exercises, tasks or activities" (2002, p. 224). The texts in this study were extracted from the larger whole, which is the textbook.

Turning to the rest of the study, I explain the statement of the problem, purpose of the study and research questions, context, significance, and overview of methods. The chapter ends with a summary.

#### **Statement of Purpose and Research Questions**

The aim of this study was to investigate gendered "truths," which inform the consumption of gendered English language and physics textbooks in Ugandan secondary schools. The study goes beyond a dominant focus on the text alone, observing classroom gendered discourses and practices around the text, as well as engaging with these in interviews with both teachers as well as their students. The focus on text, teacher, and student is more likely to inform teacher education meaningfully.

To this end, the study was guided by the following research questions:

- 1. In what ways might English language and physics textbooks in Ugandan secondary schools construct gender?
- 2. How do teachers use gendered textbooks in the classroom? What discourses and practices circulate within teacher and student "formal" classroom interactions around gendered texts?
- 3. In what ways do teachers and students respond to gendered constructions within their school textbooks? What discourses and practices are cited in their responses?

#### Context

Uganda located in East Africa is one of the developing countries in the world with a population of about 40 million and an area of 91,249 km<sup>2</sup> (World Population Review, 2015). Uganda's economy is primarily based on agriculture, with over 70% of the working population engaged in this sector (UBOS, 2011). The population is multiethnic, comprising four ethnic groups with over 52 tribes and languages with diverse cultures.