Gendered Illustrations in Philippine Textbooks

John Rey B. Java¹, Cristabel Rose F. Parcon²

^{1*}Faculty, Division of Social Sciences, West Visayas State University – Himamaylan City Campus, Negros Occidental, Philippines, ² Assistant Professor of Sociology in the Division of Social Sciences, College of Arts and Sciences, University of the Philippines Visayas, Miagao, Iloilo, Philippines

ARTICLE INFORMATION

Article History:

Received: 1/7/2016

Received in revised form: 3/29/2016

Accepted: 7/28/2016

Kevwords:

Content analysis, gender roles, gender bias, gender schema, gender socialization, hidden curriculum

*Corresponding author: John Rey B. Java (reih_19@yahoo.com.ph)

ABSTRACT

The role of the textbooks in gender socialization provided the impetus to find out if grade one textbooks used in Philippine public schools contribute to promote gender equality, which are included in the Sustainable Development Goals (UNO, 2016), i.e. goal 4-ensure inclusive and quality education for all and promote lifelong learning, and goal 5- achieve gender equality and empower all women and girls. Gender Analysis in Textbooks laid the framework of analysis to investigate the portrayals of both sexes based on Kabira and Masinjila's (1997) productive role, reproductive role, and community role, and to assess stereotypical portrayals of gender roles as form of hidden curriculum. Ten (10) grade one textbooks were examined. Quantitative and qualitative measures of content analysis were used to gather the data. Percentage distribution was utilized to quantitatively analyze the data, while in-depth/critical analysis was used to examine qualitatively the stereotypical representations of sexes. Findings revealed that female images dominated reproductive functions; male illustrations were assigned to wide collections of productive and community roles, and gender stereotyping was manifested by frequent portrayals of traditional roles of both sexes. Gender bias is present in grade one textbooks as marked by the unequal representations of males and females in three categories of human activities, portraying males to more diverse roles requiring strength and heavy labor while illustrating females to limited activities similar to their reproductive functions.

© The Authors and Asia Pacific Higher Education Research Journal

Introduction

Gender inequality is a problem that the worldwide community is trying to address, being both men and women as potentially valuable human resource of the society. With the social drawbacks brought by gender disparity, UN Sustainable Development Goals underscored the necessity to raise gender equality in education and empowerment of women (UN, 2016). However, inequality of gender is still persistent as reinforced through the socialization process in school where cultural knowledge is formally dispensed. One way that gender norms are taught and enforced in schools is through the textbooks. In fact, UNESCO (2009) highlighted that gender bias in school curricula and textbooks continues to be widespread in the form of stereotyped illustrations or languages. As Mirza (2004) explained:

> The curriculum is implemented through the textbooks; and learning materials and through the environment of the school, known as the hidden curriculum. Since every society has its gender belief system and gender stereotypes i.e. the prevailing images of what men and women are supposed to be like, the same are reflected and portrayed in the curriculum. When children enter the school environment, the images of male and female portrayed in books, crystallize their idea about gender and later their own self-image. behavior, ambitions and their expectations (p. 26).

Textbooks are one of the first forms of media to demonstrate which educational "norms" are intended to be transmitted in the classroom (Sabir, 2008). Through the representations of characters, children are given a preferred behavioural model, often presenting and reinforcing gender stereotypes (Marinova, 2003). Accordingly,

Mkuchu (2004) argued that socialization took place for children when textbooks present boys or men in a variety of well-regarded jobs than girls. He added that portrayals of men in more valued occupations are due to the predetermined ideas about the society's standards of males and females. As Kereszty, 2009 explained:

Textbooks represent the everyday life for children. They offer varieties of identities, interests, attitudes, and experiences that determine the position of the children...since they contain the basic factual knowledge and skills children are supposed to acquire, which strongly influence their view of life, their gender socialization, and also the reproduction of gender inequalities and stereotypes in the society (p.3).

Portrayed roles in textbooks influence children to control their behaviors that do not suit their personalities and behave in a way that is considered to be "appropriate" by these materials which can cause problems throughout their development (Toci & Aliu, 2013). As Williams & Gilbert (2008) explained, photographs can have more impact on children because they may be perceived as accurate, objective portrayals of reality, and they can be recalled easier compared to text.

In view of the unbroken perpetuation of gender biases in textbooks, the 1979 Convention of Elimination of All Forms of Discrimination against Women (CEDAW) recognizes the need for eliminating gender stereotyping in education, particularly in textbooks. The convention committed that any stereotypical concept of the roles of males and females at all levels and in all forms of education should be eliminated which may call for revision of textbooks and school programs (UN, 2009).

This study was laid using the foundations of the Hidden Curriculum Theory, Gender Schema Theory, and Gender Analysis on Textbooks as conceptual framework of analysis.

Gender role illustrations in this study were examined using Hidden Curriculum Theory. The hidden curriculum is defined as a set of norms, customs, beliefs and language forms that are manifested in the structure and functioning of an institution (Hernández, Gonzales, & Sanchez, 2013). Kentli (2009) in their pioneering study on hidden curriculum explained that schools are conveying a soundless but influential message to students regarding their rational ability, individual traits and the fitting career choice and this takes place through the socalled "hidden curriculum". Further, Mkuchu (2004) explicated that one major area of hidden curriculum in the schooling process that disfavors girls or women is the presence of gendered textbooks. Textbooks in this light, present more frequent portrayals of men compared to women and the latter at times may not even be featured. Additionally, they are portraying men in active roles and women in passive roles, highlighting the obvious stereotypes of how they were expected to behave. Kereszty (2009) explained that hidden curriculum influences gendered expectations, behaviors, and social norms; hence, underwrites the perpetuation of social discrimination in the society. Hidden Curriculum Theory in this study was used to explain the implications of the concealed messages of gendered illustrations in Philippine textbooks.

Further, Bem's (1981) Gender Schema Theory explained that the distinction between sexes serves as a basic shaping principle for human culture—the result when gender schema assimilates into ones' self-concept. With this, children learn which qualities are to be associated with their own biological sex resulting to the regulation of individual behavior to conform to the cultures' definition of masculinity and femininity. School, through textbooks—the

most widely used resource for learning, is viewed as potential agent in perpetuating social and cultural knowledge. As Taylor (2003) explained, books read by children may be vital sources of gender stereotyping to help out establish gendered behavior.

Moreover, the *Conceptual Model of Gender Analysis* was used to present the structure in analyzing gendered illustrations of men and women in grade one textbooks used in the Philippines (see Figure 1).

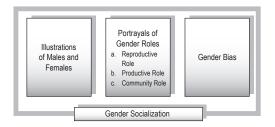


Figure 1 Conceptual Model of Gender
Analysis in Textbooks

"Gender analysis" as a framework allowed the appreciation of the nature of relationships between males and females, gender variances, their diverse social realities, life expectations, and economic circumstances as adopted from Genderbased analysis (Global Development Research Council, 2012).

As presented in the conceptual model (Figure 1), gender analysis in this study focused on gender role illustrations of males and females. The appearances of these illustrations were examined to find out if gender bias is present in grade one textbooks. In analyzing gender illustrations, Kabira and Masinjila's (1997) three categories of human activities were used, namely: the reproductive role, the productive role, and community roles. Reproductive roles are carried out at home for the preservation of the family such as collecting water, nursing children, cooking, etc. Productive roles refer to the production of goods and services for generation of income. Lastly, community roles are done for overall welfare of the community like attendance in public

barazas, funerals and church activities. Unlike productive activities, reproductive and community functions are unpaid.

Purpose of the Research Study

The Global Development Research Center (2012) stated that the Philippines continue to lead the way in Asia and the Pacific in closing gender gap. These positive developments according to the Commission on the Role of Filipino Women, 5th and 6th Progress Report on the Convention on the Elimination of All Forms of Discrimination Against Women, from 1996 to 2003 are the results of supportive actions initiated which includes textbook revisions, and modifications of instructional materials, curricula, curricula, etc. (Philippine Progress Report, 2001-2003). One way to ascertain this progress in Philippine textbooks is to evaluate how they portray gender roles, more specifically in the first grade, where children aged 6 to 7 according to Washington State Department of Social and Health Services learn to distinguish reality. develop awareness of sexual differences and start to become comfortable with their own gender identity.

Hence, this study was conducted to (a) investigate the portrayals of both sexes in terms of productive role, reproductive role, and community role, and (b) assess stereotypical portrayals of gender roles.

Portrayals of Gendered Illustrations

Several studies revealed gender bias portrayals in textbooks. For instance, the study of Wu and Liu (2015) on Chinese textbooks revealed that the social status of women's occupations was lower than that of men's. Further, their study showed that both sexes were represented more in their traditional roles; males were portrayed as driver, chef, soldier, etc., and females were portrayed as nurse, waitress, cleaner, etc. Moreover, Lu and Lin (2014) study on East Asian textbooks—Japan, China, Taiwan, and

Korea – revealed that gender imbalance on professional and job related roles.

The study of Lamug (1995) on Philippines textbooks revealed males evidently have a greater variety of occupational roles than females. Males are mostly portrayed as policemen, doctors, and fishers while females' are popularly illustrated as teachers and vendors. The same observation was made by Lee and Collins (2006) in their study of gender representation in Hongkong English textbooks where men enjoy a more variety of occupations than women, portraying them as breadwinners for their families. Lee and Collins (2010) comparative study on Hong Kong and Australian textbooks revealed a positive change on the portrayals of both sexes. Women were directed to occupations as nurturer, teacher, service and support provider, receptionist, secretary, typist and fashion/ jewelry designer. They observed as well that women gradually had changed in productive role doing university lecture, as filmmakers and accountants which might mark their development towards gender fairness. Males, on the other hand, were confined to their traditional roles, from low status roles as hunters, miners, and farmers to higher status roles of politician, marine commander, and inventor. In community roles. males dominate the pictures portraying historical events and state governance. Males had sole privilege in warmaking. Females were observed in taking part in wars, but their part in the events was not mentioned either in textual or visual contents (ZINEC-ANIMA, n.d.).

Methodology

This study adopted both qualitative and quantitative approaches of Content Analysis. Content Analysis in this study used the paper and pencil/ hand coding procedure. According to Palmquaist (1998), this method is advantageous in tracking down errors during the proceedings of

coding compared to automated programs. To ensure the validity of the content analysis, two approaches to coding data namely priori coding and emergent coding of Stemler (2001) were utilized. In priori coding, categories are established prior to analysis based on theories and previously adopted categories established by professional researchers and authors. In this study, the categories used were adopted from Kabira and Masinjila (1997) and from the National Commission on the Role of Filipino Women (1999). These were the three categories of human activities: reproductive, productive, and community roles. Emergent coding, on the other hand, was established to identify sub-categories. In doing so, textbooks were reviewed to gain preliminary impression of the sub-categories. These sub-categories were the specific activities observed in ten books studied to which observations were coded to.

The target data were the images portraying specific roles based on three major categories of human activitiesreproductive, productive, and community roles. Images that do not belong to any of the category were not part of the observation. Further, the data collection was concentrated on the images which are clearly visible, apprehensible, and classifiable based on Yasin, Hamid, Othman, Hashim, and Mohti (2012) classification of gender as a type of cultural categorization which is qualified by standard characteristics such as dress, hairstyle, facial structures, and others, equating the illustrations to portrayals of gender (male or female), institutional identity (e.g. school uniform), ethnic identity or relational identity (e.g. casual home/ play clothes). These benchmarks were used to orient the interrater in gathering and classifying of date for reliability test. The reliability coder exhibits interest in gender research. He is an experienced elementary teacher, and a professor handling courses in children literature and reading for a Bachelor in Elementary Education degree program in a State University.

Materials

Ten (10) books used in the first grade were purposively selected. Five of which were published between 1996 and 2008 and were used as learning materials before the implementation of the K to 12 program. These books are: 1) Elementary Mathematics (2008) ;2) Landas sa Wika at Pagbasa (2008); 3) Uliran 1: Edukasyon sa Kagandahang-asal at Wastong Pag-uugali (1997);4) Sibika at Kultura 1 (1996); and 5) English Expressways for Reading and Language (2008). Workbooks used after the K-12 implementation were included to assess if there were changes in the gender portrayals. These five workbooks/learners' materials all published in 2014 include: 1) Edukasyon sa Pagpapakatao (Hiligaynon); 2) Mathematics (Hiligaynon); 3) Mother Tongue - Based Multilingual Education (Hiligaynon); 4) Araling Panlipunan (Hiligaynon); and, 5) English. All these learning materials were approved and were recommended for distribution and use by the Department of Education.

Data Analysis

Illustrations that appeared in all ten textbooks were examined. Qualitative analysis was used to categorize images into different gender role categories. Similar observations were put together into a class or category, making possible the quantitative analysis. The illustrations were analyzed quantitatively by examining the frequency of occurrences of male, female, and gender neutral portrayals in reproductive, productive and community roles/activities. On the other hand, critical or in-depth analysis was used to qualitatively examine the stereotypical portrayals of sexes. Two separate analyses were conducted for the five textbooks prior to K to 12 implementation and the five workbooks currently being used.

To ensure the reliability of the quantitative findings, an *interrater reliability test* was performed. This study adopted and modified the guidelines for the Interrater

Reliability Test from the study of Mkuchu (2004) on Tanzanian Textbooks: 1) one textbook used in the first grade was randomly selected for pilot coding; 2) orientation on the three categories of human activities reproductive, productive, community roles, and on the rules in classifying observations into these categories; 3) independent coding without consultation or guidance; 4) analysis of the entire textbooks centered on the number representation of sexes in three categories of human activities; 5) independent recording of observation on tally sheets; 6) presentation of agreement on a contingency table; 7) the conduct of Cohen's Kappa and Scot Pi's Interrater reliability test; 8) reference to Mchugh (2012) presentation of Cohen's Kappa levels of reliability; 9) discussion of the overall result and resolving of disagreement in identifying categories to make final of the reliability test and agreed coding system/ sheet.

Constant comparative method for qualitative analysis was used to assess the stereotypical roles assigned to both sexes. This type of analysis allows the researchers to compare their observations with the data collected from earlier studies (Chiponda and Wasserman, 2012;, Javaid et al., 2012; Yasin et al., 2012; Fahim, 2010; Kobia, 2009; Lamug, 1995) to provide reference in the assessment of the portrayals of gender roles considered stereotypical. These researches were selected as they have direct similarity on methods and objectives of this study. Furthermore, they have common standpoint on gender stereotyping in illustrations where textbook characters are qualified specifically in traditional or the socially constructed role/activities according to sex. Moreover, these similar studies were identified to provide extensive description, cases, and examples of gender stereotypes in textbooks which were used as standards in identifying stereotypical portrayals of sexes in grade one textbooks and to later validate researchers' qualitative findings.

Results and Discussion

Grade one textbooks in the Philippines contain a large number of illustrations which are helpful in explaining the text to children. These textbooks are among the first cultural encounters of children (Iwata, n.d.) with the occupational and social picture of roles of men and women. The representation of gender roles contributes to the children's understanding of their social functions and in the formation of their gender schema. As they become gender aware, what they learn and observe are internalized and later come to be part of their gender identity and self-concept. The results revealed that illustrations in the grade one textbooks were perpetuating several biases through gendered and stereotypical illustrations of reproductive, productive, and community roles.

The results presented in the succeeding discussion are the findings of the full-scale coding by the researchers after reliability of the coding sheets/system was established through interrater agreement. Reliability tests showed that the researchers and the outside-rater had strong level of agreement with 64% to 81% of the data in pilot test were reliable when referred to Mchugh's (2012) Interpretation of Cohen's Kappa.

Reproductive Roles Portrayals

A total of 226 illustrations were observed to portray reproductive roles in the five textbooks previously used in grade one. Of these illustrations, 21 kinds of reproductive roles or activities were identified. Most (45.1%) of these illustrations portrayed females to be engaging in this type of role. Only a third of the illustrations were male portrayals, while 21 percent were gender neutral portrayals. Out of the 21 identified kinds of reproductive tasks/roles, males appeared to engage in more variety of reproductive tasks (90%) compared to females (67%) and both sexes (48%).

Table 1.Frequency Distribution of Male and Female Illustrations in Portrayals of Reproductive Roles in grade one textbooks

Types of Reproductive Roles				
Portrayed by Males and Females	Male	Female	Both	Total
in Illustrations				
Attending/taking care of children	5	22	16	43
Gardening and watering plants	16	7	5	28
Collecting/throwing garbage	9	7	5	21
Cleaning the yard	10	10	1	21
Cleaning the house	3	6	11	20
Cooking/preparing food	1	14	3	18
Feeding and livestock products	5	7	1	13
Purchasing goods	2	10	0	12
Washing dishes	2	6	0	8
Taking care of house pets	2	3	1	6
Taking care of the old	3	2	1	6
Washing, drying, fixing of clothes	1	5	0	6
Fetching water	4	0	0	4
Fixing fences	4	0	0	4
Gathering firewood	4	0	0	4
Harvesting vegetables	0	0	3	3
Cleaning poultry cages	2	0	0	2
Making compost pit	2	0	0	2
Painting the wall	1	1	0	2
Sewing	0	2	0	2
Chopping wood	1	0	0	1
Total	77	102	47	226
Percentage (%)	34.07	45.13	20.80	100
Total No. of Role Portrayed = 21	19	14	10	
Percentage (%)	90.48	66.67	47.62	

Among the five recently published workbooks, there were a total of 112 illustrations of reproductive roles (Table 2). The number of Illustrations is half of the illustrations in the earlier set of textbooks. The proportions of the males only and females only illustrations were almost equal (45.5 % vs. 44.6 %). However, the proportion of illustrations depicting both sexes performing reproductive roles was relatively lower compared to the earlier set of textbooks (9.8% vs. 20.8%).

Of the illustrations in the recent workbooks, 19 kinds of reproductive roles were depicted. Similar to the findings in the earlier set of textbooks, the proportion of roles performed by males was higher compared to the proportion of roles performed by females.

Table 2.Frequency Distribution of Male and Female Illustrations in Portrayals of Reproductive Roles in grade one textbooks under K to 12 Program

0		0		
Types of Reproductive Roles Illustrated	Male	Female	Both	Total
Attending/taking care of children	18	24	7	49
Cleaning the yard	7	2	0	9
Purchasing goods	1	8	0	9
Collecting/throwing garbage	5	2	0	7
Gardening	0	3	3	6
Cleaning the house	2	3	0	5
Washing clothes	2	2	1	5
Making compost pit	4	0	0	4
Fixing house parts /furniture / appliances	3	0	0	3
Cooking/preparing food	2	1	0	3
Watering plants	1	2	0	3
Taking care of house pets	2	0	0	2
Wiping the table	1	0	0	1
Washing dishes	0	1	0	1
Fixing bed	0	1	0	1
Drying clothes	1	0	0	1
Harvesting vegetables	0	1	0	1
Painting the wall	1	0	0	1
Fixing clothes	1	0	0	1
Total	51	50	11	112
Percentage (%)	45.54	44.64	9.82	100
Total No. of Role Portrayed = 19	15	12	3	
Percentage (%)	78.95	63.16	15.79	
<u> </u>				

Using qualitative measures content analysis, it was found out that the reproductive functions portraying males in all books were observed to require strength and hardwork (e.g., fetching water, fixing fences, gathering firewood, cleaning poultry cages, making compost pit, and chopping wood, fixing house parts, etc., see for example Figures 2 and 3), which all appeared to be completely exclusive to males in the illustrations. However, males were also portrayed more than females in gardening and watering of plants and taking care of the old, which are considered feminine functions in the domestic sphere. On the other hand, females were portrayed more than males in attending and taking care of children, cooking and preparing food, feeding the livestock, purchasing goods, washing dishes, taking care of house pets, sewing, washing, drying, and fixing of clothes.

Both males and females were mostly illustrated in their socially and culturally defined domestic functions; examples are Figures 2 and 3. However, among the grade one workbooks recently published for K to 12 program, the portrayals of males performing roles related to attending and taking care of children (Figure 4) improved. Compared to the previously published textbooks where male roles were more limited to outdoor and physically demanding household tasks, recent workbooks were observed to present males in a wider range of domestic roles.



Figure 2. Traditional Reproductive Roles Source: Uniliran 1: Edukasyon sa Kagandahang-asal at Wastong pag-uugali (p.30 & 34)

Grade one textbooks studied contain more female portrayals of reproductive roles compared to male and gender neutral illustrations, and these findings are common to other studies (Fahim, 2010; Mkuchu, 2004; Yasin et al., 2012). Males were presented in more types of domestic roles/activities. It was observed that there was a wide variety of domestic activities requiring physical strength and hard work. See for instance Figure 3



Figure 3. Traditional Male Reproductive Role Source: AralingPanlipunan-Hiligaynon (p. 99)

On the other hand, the roles that were portrayed by women were focused on providing care, meal preparation and nurturing activities. These observations are comparable to the findings in the study of Yasin and colleagues (2012) on Malaysian textbooks where women were depicted in domestic spheres like attending her children's needs, providing them the loving care and support, roles of wives, mothers, and nurturers. Poduval and Poduval (2009) explained that motherhood confers upon woman the duty of raising a child. Society in this light perceived woman to have more ability of raising a useful member of the society. This assessment does not completely apply on the recent workbooks produced by DepEd for the K to12 program. Though taking care of the young ones still appeared to be the most portrayed reproductive role, a positive change on male representation was observed. Aside from the secondary and support functions portrayed of males in both textbooks, the recent workbooks illustrated males in single portrayals in child caring related roles and in several illustrations they were presented as co-equal of females on this type of role (Fugure 4).



Figure 4. Traditional Reproductive Roles Source: AralingPanlipunan – Hiligaynon (p. 91)

This conveyed a strong message of gender-positive function supportive of males. Learners in this light are oriented of both sexes participation in child caring and rearing which are essential functions in the maintenance of the family. According to Mkuchu (2004), the involvement of both males and females in child rearing practices is a gender positive move in writing textbooks.

However, there were still stereotypical representations of reproductive roles in all grade one books analyzed. What was unexpected was the portrayal of males in a more number of roles compared to women. More appearances of males portraying tvpical masculine household chores indicated the underrepresentation of women in domestic functions. It did not mean that when men were illustrated to engage in more reproductive roles that they have fulfilled their share in the chores, rather the messages sent by these illustrations were still very conventional. Children would see physical and outdoor tasks were performed by men, while care and indoor tasks were performed more by women. Further, in the illustrations, mothers socialized their daughters to perform these feminine tasks, while fathers socialized their sons into the masculine tasks.

Productive Roles Portravals

Old textbooks used in grade one presented a total of 221 illustrations (Table 3) depicting this type. There was a considerable difference in the proportion of exclusive male and exclusive female productive role portrayals (60.7% vs. 37.4%). One the other hand, only 4 illustrations were found to include both males and females engaging in this type of role. Further, with the 36 roles of productive nature observed in grade one textbooks, males were illustrated with more variety of occupational/ productive roles (89%), compared to females (42%) and gender neutral portrayals (11%).

Table 3.Frequency Distribution of Male and Female Illustrations in Portrayals of Productive Roles in grade one textbooks

Types of Productive Roles				
Portrayed by Males and Females	Male	Female	Both	Total
in Illustrations				
Teacher	6	27	1	34
Seller/vendor	9	13	0	22
Farmer	16	0	1	17
Fisher	17	0	0	17
Police officer	9	3	0	12
Nurse	1	10	0	11

Carpenter	9	0	0	9
Driver	9	0	0	9
Doctor	5	3	0	8
Tailor/garment worker	3	5	0	8
Fireman	7	0	0	7
Salesperson/sales Rep.	2	4	0	6
Construction worker	5	0	0	5
Dentist	2	3	0	5
Librarian	0	4	0	4
Baker	2	0	1	3
Canteen crew	1	2	0	3
Factory workers	3	0	0	3
Janitor	3	0	0	3
Mineworker	3	0	0	3
Architect	2	0	0	2
Cashier	1	1	0	2
Pearl diver	2	0	0	2
Scientist	1	0	1	2
Shoemaker	2	0	0	2
Craftsperson	1	1	0	2
Car washer	1	0	0	1
Chef	1	0	0	1
Draftsman	1	0	0	1
Gasoline station worker	0	1	0	1
Hair stylist	0	1	0	1
Mailman	1	0	0	1
Office Clerk	1	0	0	1
Pilot	1	0	0	1
Sculpture	1	0	0	1
Waiter	0	1	0	1
Total No. of Occurences	128	79	4	211
Percentage (%)	60.66	37.44	1.90	100
Total No. of Role Portrayed = 36	32	15	4	
Percentage (%)	88.89	41.67	11.11	

The recent workbooks used in grade one presented fewer illustrations of productive roles with almost the same type of roles to those incised in old textbooks (Table 4). Interestingly, females more frequently appeared to be engaging in productive roles than males (58.8% vs. 41.2%). There were no illustrations observed having both males and females in the picture performing a productive task. The kinds of productive roles portrayed were also evidently fewer compared to the earlier textbooks. These 2014 workbooks portrayed only 11 kinds of occupational roles, of these, 73 percent were portrayed by males and only 45 percent by females. It is noticeable that despite the higher frequencies of females performing productive tasks, the kind of role they engage in (e.g., vendor and teacher) is limited compared to the variety of tasks males were portrayed to be performing.

Table 4.Frequency Distribution of Male and Female Illustrations in Portrayals of Productive Roles in grade one textbooks

Types of Productive Roles Illustrated	Male	Female	Both	Total
Vendor	3	9	0	12
Teacher	0	8	0	8
Farmer	4	1	0	5
Driver	2	0	0	2
Nurse	0	1	0	1
Barber	1	0	0	1
Doctor	0	1	0	1
Janitor	1	0	0	1
Police Officer	1	0	0	1
Painter	1	0	0	1
School Principal	1	0	0	1
Total	14	20	0	34
Percentage (%)	41.18	58.82	0	100
Total No. of Role Portrayed = 11	8	5	0	
Percentage (%)	72.73	45.45	00	

In old textbooks analyzed, females illustrations frequently appeared in portraying occupational roles like a teacher, seller/vendor, nurse, garment worker, dentist, sales representative, librarian, canteen/restaurant crew, and hair stylist. Male portrayals, on the other hand, were concentrated on roles as farmer, fisher, police officer, carpenter, driver, doctor, fire fighter, construction worker, baker, factory worker, janitor, mine worker, architect, pearl diver, shoe maker, car washer, chef, planner/ designer, mail carrier, office clerk, pilot, and sculpture. These results revealed that the multiplicity of roles engaged in by the males in the illustrations was focused on the kinds of productive roles demanding physical strength and heavy labor. As shown in the examples in Figure 5, women were portrayed to engage in occupations providing care (e.g., teacher and nurse), while men were portrayed in either white collar occupations or physically demanding jobs.



Figure 5. Productive Role Illustrations

Source: Uniliran 1: Edukasyon sa Kagandahang-asal at

Wastong pag-uugali (p.127 & 125)

It is noteworthy that in old textbooks, both sexes were equally portrayed as crafts persons, scientists, and cashiers. There were non-bias gender illustrations observed in all the books studied, such as females were illustrated as police officer, gasoline station crew, and waitron; and in jobs like stitching and tailor making. Though low in occurrences, presenting both males females in these types of roles is a positive move in promoting gender equality in school. Additionally, in recently published grade one workbooks, it was observed that almost the same types of roles were illustrated with minimal illustrations of non-traditional jobs like portraying women in farming and males as vendors (see Figure 6). The nonportraval of wide array and real-life roles of both sexes had more likely resulted to underrepresentation of productive roles in five workbooks presently used in grade one.

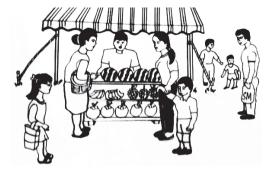


Figure 6. An illustration portraying male in non-traditional occupation

Source: Mother Tongue-Based Multilingual Education (p. 97)

Males dominated and were illustrated in more variety of productive roles both in old and recent books used in grade one. This observation is comparable to the findings of other studies on school textbooks (Faroutan, 2012; Paynter, 2011; Sabir, 2008; Mirza, 2006). Lamug (1995), in her study on Philippine textbooks, presented similar findings that females' popular occupational roles are being a teacher and a vendor while males evidently have multiple occupational roles, where the most common occupational roles for males are policeman, fisher, and doctor. Some of these productive roles were even limited to males in pictures like farming where no portrayal of female in old textbooks and only single illustration of her was found in a recent workbook. This observation is contrary to Lu's (2011) report that women in the Philippines play a key role in farming activities including seeding, weeding, pesticide application, harvesting, and marketing of crops.

The types of productive and occupation roles were highly gendered, following the stereotyped care and nurturing occupations for women and the hard labor for men. Men were also seen to be portrayed performing jobs with high occupational prestige (e.g., doctor, pilot, office worker) reflecting the gender inequality in the workplace. In the real world, both sexes had taken a leap from the traditional jobs, males' occupations had been extended to sales and marketing, customer services, nursing, and many more, which were not expressively reflected in grade one textbooks. Portraying females and males in conventional functions according to Mkuchu (2004) affects both boys and girls unhelpfully; however, the most affected individuals are girls whose employment is narrow.

In-depth analysis of illustrations, in Figure 3 for instance, showed how females were viewed to function in two roles, thwarting therefore their potentials to prosper in their occupational functions. Males, in the illustration were completely portrayed in their productive roles while

females were presented in both productive and reproductive functions, thus highlighting the home and the job engagements of the mother. As explained by the Women and Gender Institute of Miriam College (n.d.), in the real world, despite women's increasing education, employment, and migration, children remain with the responsibility of women. Women bear the burden of a difficult "double day" as they effort to make both ends meet as well as take care of the children. In this light, females' participation in productive sphere is restricted and when women access the labor market they are unable to secure decent jobs (UN Women, 2011). These portrayals send messages to children that despite productive work, women are still expected to bear the brunt of the reproductive work.

Although most of the illustrations in old textbooks presented both sexes in their traditionally defined roles, it is worth to mark that the previously used textbooks and recent workbooks used in grade one showed indications of neutrality and gender positive shifts on the occupational and productive roles. Presenting males and females in occupations not traditionally expected of them is a step towards gender equality. On the other hand, the new workbooks used in grade one failed to present variety and reallife jobs of both sexes, thus limiting male and female characters on selected conventional productive roles.

The stereotypical and gendered occupational portrayals of the occupational roles contribute to the gender schema of children. These portrayals of men and women occupations help shape their expectations of future jobs and career choices. The hidden messages of multiple burden could also contribute to the girl's understanding of her role in the household and how should she balance them with her productive work.

Community Roles Portrayals

Lastly, the community roles of men and women were examined. Old textbooks

portrayed a total of 178 illustrations (Table 5). Illustrations of community roles presenting males were observed to have the highest percentage count (43.8%), followed by gender neutral illustrations (40.4%), and females with the slightest number of portrayals (15.7%).

Table 5.Frequency Distribution of Male and Female Illustrations in Portrayals of Community Roles in grade one textbooks

Types of Community Roles				
Portrayed by Males and Females	Male	Female	Both	Total
in Illustrations				
Attending Religious Activities	22	0	34	56
Preparing/involving in town fiesta	26	11	11	48
Participating Community "do day"	23	3	7	33
Attending Flag Ceremonies	3	2	16	21
Attending celebrations	2	4	0	6
Participating in Charity	0	5	1	6
Preparing for Holidays	0	2	2	4
Attending Community Program	2	1	1	4
Total No. of Occurences	78	28	72	178
Percentage (%)	43.82	15.73	40.45	100
Total No. of Role Portrayed = 8	6	7	7	
Percentage (%)	75.00	87.50	87.50	

Similarly, new workbooks used in grade one portrayed almost the same kinds of community roles, consistently presenting participation to religious activities as the most illustrated activity. It is as well worth to note that community roles in 10 textbooks studied placed emphasis on gender-equal representation in the attendance to flag ceremony and religious activities.

Table 6.Frequency Distribution of Male and Female Illustrations in Portrayals of Community Roles in grade one textbooks

Types of Reproductive Roles Illustrated	Male	Female	Both	Total
Attending religious activities	3	3	8	14
Attending flag ceremonies	0	0	5	5
Tree planting	1	2	0	3
Attending program	0	0	2	2
Feeding program	0	1	0	1
Total	4	6	15	25
Percentage (%)	16.00	24.00	60.00	100
Total No. of Role Portrayed = 5	2	3	3	
Percentage (%)	40.00	60.00	60.00	

In the community role participation of the men and women, there were no substantial gender differences in the occurrences of these portrayals. For instance, boys and girls were equally represented in attending a flag ceremony (See Figure 7). This observation is consistent in two sets of school books studied. These gender-neutral portrayals signify that both sexes are equally important in the promotion of patriotism and nationalism.



Figure 7. An illustration showing an equal representation of sexes in attending flag ceremony Source: LandassaWika at Pagbasa 1 (p. 58)

Furthermore, 10 textbooks analyzed illustrated expressively gender-equal representation of both sexes in participation to religious activity. This may send to learners the idea that both sexes are taking parts in their church-related obligations which basically reflect the Filipino cultural value of religiosity. Though quantitative findings are insufficient to discuss extensively the portrayals of community roles, illustrations examined clearly presented the differences in the kind and quality of tasks assigned to boys/men and girls/women in their community activities, which still reflected the stereotyped roles. Similar gender differences in the reproductive roles/ activities are extended in the community. In other words, the gendered division of labor in the domestic sphere was expected to be observed in the community and economy as well.

Portrayals of Gender Role Stereotypes

Textbook illustrations were analyzed on how they presented males and females and if these illustrations adhere to the gender role stereotypes. In the aforementioned discussion of results, it can be said that most of the illustrations of role types, especially of productive and reproductive roles, presented men and women in the roles and activities traditionally and culturally assigned to them. For instance, females were mostly illustrated in roles related to caring and support, nursing, and roles of wives (Figure 5). On the other hand, gender roles requiring strength and heavy labor were stereotyped to males. These socially expected functions attached to both gender were extended to occupational functions. Females were mostly illustrated as teachers, vendors, nurse, garment worker, etc.—all comparable to their home-related activities. Representation of males on the other, aside from being observed in multiple job functions, remained exclusive to roles as farmers, fishers, fire fighters, construction factory workers. workers. mineworkers, etc.; which generally are jobs requiring heavy work.



Figure 8. Gender Stereotyping in Domestic Role

Source: Uliran 1: Edukasyon sa Kagandahang-asal at Wastong Pag-uugali (p. 81)

Though males and females were portrayed in doing their domestic functions together, they were not equally portrayed when investigated according to the type and quality of work done. An example is the illustration of a family (see Figure 2) which shows a father sweating after making a compost pit while the mother is attending to

the children. It is noteworthy how the eldest son is portrayed to be throwing a sack of junk and the girl dropping pieces of trash into the hole. The illustration demonstrated how tasks are gendered despite the appearances of both sexes. The children were also portrayed to engage in gendered tasks. Through these representations of characters, children are given a preferred individual behavioral model, often presenting and reinforcing gender stereotypes (Marinova, 2003).

Gender Socialization and the Hidden Curriculum

One important lesson children learn here is the consistency of gendered tasks from the household to the societal levels. Through the illustrations, children unconsciously learn these roles which are associated to their own sex resulting to the regulation of individual behavior to conform to the cultures' definition of maleness/ masculinity and femaleness/femininity. The Gender Schema Theory explained that children learn these gender roles, activities, and attributes. These concealed messages in textbook illustrations have powerful influence in building the children's selfconcept and gender identity.

Through the textbooks, the society, particularly the school, unconsciously reproduce and perpetuate gender biases and stereotypes. According to Fahim (2010), the patriarchal socialization patterns emanating from cultural norms and values still hold true by textbooks' portrayals of traditional gender roles, stereotypical and binary male/ female divisions. As such, McCabe, Fairchild. Grauerholz, Pescosolido, Tope (2011) argued that books reinforce, legitimate, and reproduce a patriarchal gender system. This indeed had become part of everyday socialization process, leading therefore to the unconscious actions of the illustrators and authors to portray stereotypical roles resulting to gender biases in grade one textbooks.

Conventional portrayals of gender, across types of roles, are still persistent in all textbooks, although the degree of stereotypical portrayals has lessened when the two sets of textbooks were compared. These portrayals of stereotyped illustration of both sexes are clear manifestations of society's view of masculine and feminine roles amidst the fact that their functions and activities had changed dramatically. The biased portrayals of gender in grade one textbooks are forms of discriminatory treatment and marginalization of roles assigned to men and women. The higher frequency of male portrayals and greater variety of roles portrayed by males contribute to the underrepresentation and marginalization of women. The very bases of these discriminatory representations are the gender stereotypes. These biased portrayals are not helpful to the goal of gender equality.

The perpetuation of gendered illustrations and underrepresentation of women in picture texts is at the center of the hidden curriculum. Through them, the status quo on gender relations is maintained. The gender socialization experienced through the textbooks has been an obstacle in the society's attempt to promote gender equality, which is one of the Sustainable Development Goals. Not only that, but these gendered portrayals may come into conflict with the actual experiences of children regarding gender roles at home.

Conclusion and Reccommendations

After applying gender analysis to grade one books, it was found out that biases were present in textbook illustrations which cannot represent women, and minor portrayals of the changing roles of men and women in the society. Both sexes were expressively portrayed in their traditional functions, thus, portraying women in limited and narrow functions in production, and close parallelism in the gender division of labor in the household and community activities. Even in the reproductive roles,

most of the activities attributed to women were indoors (i.e., private sphere), while most of the outdoor activities were assigned to men. These gendered illustrations in the analyzed textbooks may considerably strengthen society's traditional views of males and females, thus, contributing to the gender schema shaping the behavior and life prospects of boys and girls in the society. Further, though non-stereotypical portrayals were noticeably observed in illustrations, particularly in the more recently published books, they may not be sufficient to produce changes in the gender schema of children, much less in promoting gender equality.

The over-all research concluded that amidst the progressive gesture of the government to guarantee positive development towards the abolition of gender disparities in education, like revisions of textbooks, there were still fragments of gender biases specifically on how sexes were illustrated in textbooks. These were evident in grade one textbooks published between 1996-2008 and in recently used workbooks all published in 2014. The messages sent by these materials are still being perpetuated as forms of hidden curriculum, which contributes to the gender socialization in school. Though proposition and judgment arrived at after looking into both qualitative quantitative measures remains and exclusive to 10 books which were content analyzed, there is still a lot to be done in order to improve gender representations in Philippine textbooks. It is understandable that conventional gender views are difficult to change but it is commendable that materials depicting these cultural views are being modified. Portraying both males and females in non-traditional roles are positive actions towards mainstreaming gender into the Basic Education Curriculum.

Lastly, the truths about gender positive development in all aspects of life in the Philippines could have been depicted in textbooks, suggestively to the entry point of formal learning where learners started to formulate a sense of femininity

and masculinity, organized their behavior around them, and learned to distinguish reality to become comfortable with their own gender identity. It is in this light that gender, specifically among the marginalized girls at young age, could liberate themselves from gender norms and detrimental expectations ascribed to them by the patriarchal society. Gender neutral portrayals may remove the exclusivity to boys and girls and remove the discrimination among the children who may have gender identity not belonging to these two (i.e., transsexuals, intersexed, etc).

Future researchers may widen the scope of similar studies by doing comparative studies between textbooks in different grade levels, new and old textbooks, textbooks used in different subject areas among others, linguistic sexisms in school books, etc. It is in this light that all aspects of gender issues in textbooks and other academic materials and in education as a whole will be looked into, to continuously move forward in the attainment of a completely gender-equal learning experience for children.

Based on the findings of the study, the following policy actions are recommended: (1) The Department of Education as the major organ on the Philippine Basic Education may promote gender mainstreaming of the curriculum through regular and coherent conduct of training workshops for the working personnel of publishing houses (i.e., authors, writers, illustrators, and assessors) to improve and strengthen further the measures in producing gender balanced textbooks; (2) The Curriculum Development Division of DepEd may invite experts specialized on gender studies in planning on how to sensibly and equally portray males and females in reproductive, productive, and community roles representation, including the changing and the real-life roles of both sexes to guarantee gender balance in textbook content and in curriculum—all supportive to gender sensitive advocacy of the DepEd and the Philippine government as a whole; (3) The Instructional Materials Council Secretariat as assigned by DepEd

in establishing the required textbook standards to guide the textbook industry and as the responsible body for the selection procurement of these materials. may encourage accredited academicians, textbooks and curriculum specialists, and other members of the evaluation board to be more critical and rigid on their assessment on the content - most especially the gender aspect - of the textbooks prior to procurement and distribution; and, (4) classroom teachers be regularly trained to be more gender sensitive and genderneutral in their pedagogy to equip them to counterbalance gender bia messages conveyed by textbooks and other learning materials.

Reference

Bem, S.L. (1981). Gender Schema Theory:
A Cognitive Account of Sex Typing.
Psychological Review (American
Psychological Association), 88 (4),
354 – 364. Retrieved at http://www.
apa.org/pubs/.

Chiponda, A. & Wassermann, J. (2013). Women in history textbooks – What message does this send to the youth? Retrived at http://www.scielo.org.za/scielo.php?

Fahim, K.A. (2010). Gender issues and textbooks: Gender bias in pashto primary school textbooks in Afghanistan. Retrieved at http://www.academia.edu/.

Global Development Research Center (2012). *Gender analysis as a development research tool*. Retrieved at http://www.gdrc.org/gender/index.

Hernández, M. N., Gonzales, P. R., & Sanchez, S. V. (2013). Gender and Constructs from the Hidden Curriculum.

- Creative Education, 4(1), 89 92. Retrieved at http://file.scirp.org/pdf/CE
- Javaid, U., Jabeen, U. & Omer, S. (2012).
 Rife manifestations of gender segregation in Indian society:
 Evidence from textbooks. South Asian Studies, A Research Journal of South Asian Studies, 27(1), 21 34. Retrieved at pu.edu.pk/home/journal/9/.
- Kabira, W.M. and Masinjila, M. (1997).

 ABC of gender analysis. Forum for African Women Educationalists (FAWE). Retrieved at http://www.afghanlivelihoods.com/.
- Kentli, F.D. (2009). Comparison of Hidden Curriculum Theories. *European Journal of Education Studies, 1* (2), 83–88. Retrieved at http://ozelacademy.com/.
- Kereszty, O. (2009). Gender in Textbooks. *Practice and Theory in Systems of Education, 4 (2), 1-7.* Retrieved at http://unesco.org.pk/education/.
- Lamug, C. B. (1995). Gender Role Stereotypes in Elementary School Textbooks. *Edukasyon, UP-ERP Monograph Series, 1*(4), 1–21.
- Lee, J. F. K. & Collins, P., (2006). Gender representation in Hong Kong English textbooks. Retrieved from http://www.eoc.org.hk/eoc/upload/2006711112336211184.pdf.
- Lu, J. L. (2011). Relations of feminization of agriculture and women's occupational health—the case of women farmers in the Philippines.

 Retrieved at http://www.biomedsearch.com/.
- Lu, C. L & Lin, Y. J. (2014). The Eastern Asian research on gender bias

- in secondary school textbooks. *International Journal of English Language Education*, 2(2), 197–208. Retrieved at: www.macrothink.org/journal/.
- Marinova, J. (2003). Gender stereotypes and the socialization process. Gender stereotypes in Elementary school textbooks (Grades 1, 4, and 8). Retrieved at www.osim.org.me/fosi.rom_en/.
- McHugh, M.L. (2012). Interrater reliability: the kappa statistics. *Biochemia Medica*, 22(3), 276–282. Retrieved at www.biochemia-medica.com/.
- Mirza, M. (2006). *Gender Analysis of School Curriculum and Text Books.* UNESCO, Islamabad. Retrieved at http://unesco.org.pk/.
- Mkuchu, S. (2004). Gender Roles in Textbooks as a Function of Hidden Curriculum in Tanzania Primary Schools. Retrieved at http://uir.unisa.ac.za/.
- Paynter, K. (2011). Gender stereotypes and representation of female characters in children's picture books. Retrieved at http://digitalcommons.liberty.edu/
- Palmquist, M. (Editor). 1998. Content analysis. Retrieved at http://www.colostate.edu/Depts/WritingCenter/references/research/content/
- Philippine Progress Report (2001-2003).

 On the implementation of the Beijing platform for action and outcome of the 23rd special session of the General Assembly. Retrieved at http://www.un.org/womenwatch/
- Poduval, J and Poduval, M. (2009). Working mothers: How much working, how much mothers, and where is the

- womanhood? Retrieved www.ncbi. nlm.nih.gov/.
- Sabir, A. (2008). Review of Moroccan school textbooks for gender equality and human rights by regional director (HREA): Project Results. Retrieved at http://www.achr.hn/newen63. html, 1-2...
- Toci, A. & Aliu, M. (2013). Gender stereotypes in current children's english books used in elementary schools in the Republic of Macedonia. American International Journal of Contemporary Research, 3 (12). Retrieved at http://www.aijcrnet.com/.
- Taylor, F. (2003). Content Analysis and Gender Stereotypes in Children's Books. *Teaching Sociology*, *31*(3), 300–311. Retrieved at http://www.jstor.org/.
- UNESCO in the Asia-Pacific No.20 (2009). Retrieved at www.unesco.org/
- United Nations Organization, (2009). Convention on the elimination of all forms of discrimination against women. Retrieved at http://www.un.org/womenwatch/.
- United Nations Organization, UNO (2016). Sustainable Development Goals. http://www.un.org/sustainabledevelopment/education/.
- Washington State Department of Social and Health Services (2009). *Child Development Guide: 6-7 Years.* Retrieved, at http://www.education.com/.

- Women and Gender Institute, Miriam College (n.d.). Gender Socialization in Philippine Child-Friendly Schools. Retrieved at www.hurights.or.jp/pub/hreas/7/13GenderSocialization.pdf.
- Williams, S. & Gilbert, A. (2008). Analyzing the impact of gender on depictions of touch in early childhood textbooks. *Early Childhood, Research and Practice, 10*(2). Retrieved at ecrp. uiuc.edu/v10n2/gilbert.
- Wu, H. & Liu W.L. (2015). Gender Representation in Primary English Textbooks in Mainland China1978 to 2003. International Journal of Humanities and Social Science, 5(6), 116-129. Retrieved at http://www.ijhssnet.com/journals/.
- Yasin, M. S. M, Hamid, B. H., Othman, Z., Hashim, F., & Mohti, A. (2012). A visual analysis of a Malaysian English school textbook: Gender Matters, Asian Social Science. 8(12), 155–163. Retrieved at http://dx.doi.org/10.5539/.
- ZINEC ANIMA (n.d). Gender Stereotypes in Elementary School Textbooks (Grade 1,4, and 8) Use in Montenegro. Retrieved at www.osim.org.me/

Materials/Sources of Data

- Anastacio, T. M., Cruz, G. M., Curugan, A. M., Nadora, A. C., Quinto, J., & Sajise, R. (2014). *Edukasyon sa pagpapakatao unang baitang, kagamitan ng magaaral sa hiligaynon*. Philippines: FEP Printing Corporation.
- Carino, I. D. & Acuna, A. M. (2008). *Elementary Mathematics*. Mandaluyong City, Philippines: Cacho Hermanos, Inc.
- Danao, C. P. (1996). Sibika at kultura 1, batayang aklat para ss unang baitang. Philippines: Brown Madonna Press, Inc.
- Jocson, D. L. G., & Baranda, J. (2014). Mother Tongue Based-Multilingual Education—unang baitang kagamitan ng mag-aaral: hiligaynon. Philippines: Vibal Group, Inc.
- Liwanag, B. (2007). Landas sa wika at pagbabasa, batayang aklat sa Filipino. Quezon City, Philippines: Dane Publishing House, Inc.
- Lusong-Oyzon, M. V. P., & Agcaoili, C. B. (2014), *Araling Panlipunan–unang baitang, kagamitan ng mag-aaral sa Hiligaynon*. Philippines: FEP Printing Corporation.

- Nicasio, P. N. (1997). *Uliran 1, edukasyon sa kagandahang-asal at wastong paguugali*. Metro Manila, Philippines: Jave Publishing House, Inc.
- Par, S., Preclaro, M. H., Astilla, J. C. S., Razon, P. A., Santos, J. R. C., dela Paz, J. M. T., Zuńiga, Y. R. C., & Principe, J. N. G. (2014). *English Grade 1 activity sheets.* Philippines: Lexicon Press, Inc.
- Portes, A., Balajadia, J., de Jesus, A., Reyes, A., & Siao, C. (2008). *English expressways, reading and language textbook for Grade One.* Quezon City, Philippines: SD Publication, Inc.
- Ulep, S. A., Landrito, L. M., Callanta, E. G., Canoningo, A. M., Ong, D. M., Bautista, G. P., Ronda, E. R., Manalac, T. R., Nivera, G., & Remoto, S. (2014). *Mathematics, gamit pang estudyante, Hiligaynon*. Philippines: FEP Printing Corp.