



Gender Positioning in Textbook Images and
Their Interpretation by Young Readers in Nepal

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the degree of

Master of Arts (Research)

under the supervision of Dr. Hilary Yerbury

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I, *Pragya Paneru*, declare that this thesis is submitted in fulfilment of the requirements for the award of *Master of Arts (Research)*, in the *Faculty of Arts and Social Sciences* at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Abstract

This research explores the gender patterns in the images within the newly implemented curriculum textbooks in Nepal. Secondly, it investigates how children relate to the images and what kinds of gender and cultural patterns are reflected in their own drawings and image selection, discerned through participatory activities and interviews. To meet these research objectives, this research adopted a case study method, with Grade 1 children drawn from two schools. A social semiotic approach was used to analyse the data.

The findings from the analysis of textbook images revealed cultural as well as gender implications. The new textbook cover images published by the government present greater gender equality in comparison to the previous curriculum textbooks and the government endorsed textbook covers. However, the analysis of illustrations indicated that despite improvements in the balance of depictions, females were still shown more in settings suggesting domestic chores, and male dominance was maintained in outdoor spaces and occupations. The findings from the participatory children's study and interviews demonstrated the influence on children of the images that they encountered in their textbooks alongside existing Nepali social context and gender attitudes. Their drawings showed an iconic and idealised Nepali environment, for example, presenting the typical houses of the textbooks rather than the type of houses they actually lived in. Children's gender attitude was apparent in their oral description of their images associating females with cooking and washing activities, although they indicated, as an afterthought, their awareness that males should also take part in these chores.

Theoretically, this study contributes to the field of gender from a human rights and social change perspective. Methodologically, its contribution lies in its use of social semiotics to explore the representations of gender and understandings of young children in a social context. Practically, this study contributes to the field of Nepalese education regarding the value of images in textbooks. The findings from this study also have policy implications in gender and other representative aspects of textbook illustrations.

Covid-19 Impact Statement

Covid-19 in its initial peak days affected almost everyone. This research could not remain untouched by its impacts either. Covid-19 interrupted the field work for this research, making data collection in the field impossible. My field sites were schools in two parts of Nepal. The institutions from which I expected to collect data were all shut down due to its impact; and in any case, if I had been able to arrange a flight to Nepal, I would not have been permitted to return. The alternative was to collect data online. This was a difficult task for two reasons: the first school I was to collect data from, like much of the country, is not technologically advanced and secondly, the children from whom I was to collect data were very young and not used to using the online platforms necessary to interact with them. However, I collected data from students in the first school in this way with the help of the local teachers. I was able to travel to Nepal after the first phase of Covid-19, but data collection there was also not under normal circumstances, as I had to use precautionary measures to go among the young students, making the experience a difficult one for them as well as for me.

Covid affected me personally. As an international student, for the first time in my life I became very cautious, even worrying about leaving my house. I felt the pain of losing friends and colleagues to the disease, including one of my professors back home. Here in Sydney, Covid-19 shut down all university allocated spaces for study. As a result, it impacted the study of students like me whose only reliable place for study was the university. Workshops went online and made it more difficult to create or sustain relationships with my supervisors and fellow students. I lost my initial supervisors twice to Covid-related redundancies and had to start again. This definitely made me, along with other students, feel lonely and vulnerable. Nevertheless, I believe I have put in my best efforts in this thesis despite the circumstances mentioned above.

Keywords

Gender, textbooks, Nepal, Grade 1 children, social semiotics

Dedication

To my *Buwa* who made me realise reading is powerful and rewarding.

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First, I want to acknowledge this Gadigal land of the Aboriginal people that remained my home away from the home in my academic journey. The time spent in this land has always been rewarding and surreal as this was my dream destination for my study as an international student.

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Publications related to the thesis

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- Gender Stereotype in Nepali Television Channels.

2008 Master of Arts (English), Tribhuvan University, Nepal

- Celebration of Homosexuality in Armistead Maupin's *The Night Listener*.

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1. Introduction to the Research

1.1 Introduction

This chapter sets out the background to the study and situates me and my interest in conducting this research. It briefly explains the relevance of this research at the time of social and political changes in Nepal, which placed emphasis on greater gender equality, impacting social and educational policies in the country. Additionally, this chapter explains the significance of this research in the current changed context and its potential impacts on the stakeholders of education in Nepal for achieving gender parity through education as well as presenting its significance conceptually and methodologically. Finally, the chapter presents a summary of each chapter in this thesis.

1.2 Situating the Researcher

Textbooks shape the view of the learners about the social life they are living and the life that is presented in the textbook contents. I was born in the Far Western Hills named Doti and studied up to Grade 3 there (see the map of Nepal below). Later my family moved to Dhangadhi, a town in the Far Western *Terai* (Western plains) in Kailali district where I completed the rest of my schooling and completed my bachelor's level study. As a student at a private school in both places, I remember we had textbooks with content that did not belong to my place and the people around me. Rather they presented highly centralised content focusing on the capital city Kathmandu and the surrounding valley, national personalities who rarely belonged to our place, and the kings and political leaders residing in the capital city, along with national Hindu festivals, and national icons that were generally connected to the nation rather than our locality. As the textbooks avoided local places, local cultures, local languages, local festivals, and the multiple ethnicities residing in my places, I always felt disconnected from the things we were learning in the books and the life we were living, which is similar to the feeling described by Bal Chandra Luitel in his autoethnographic study of culturally dislocated curricula in Nepal (Luitel & Taylor, 2005). I felt as if I belonged more to the idea of the country than to my locality, and the textbooks were helping me gather information on these important

national topics that I was not familiar with. As a result, I grew up thinking that local, rural, cultural, language and identities are insignificant compared with the national language and culture, and in being a citizen of the nation. Therefore, I never appreciated the local language, ethnicities, and cultures while striving toward what was national.

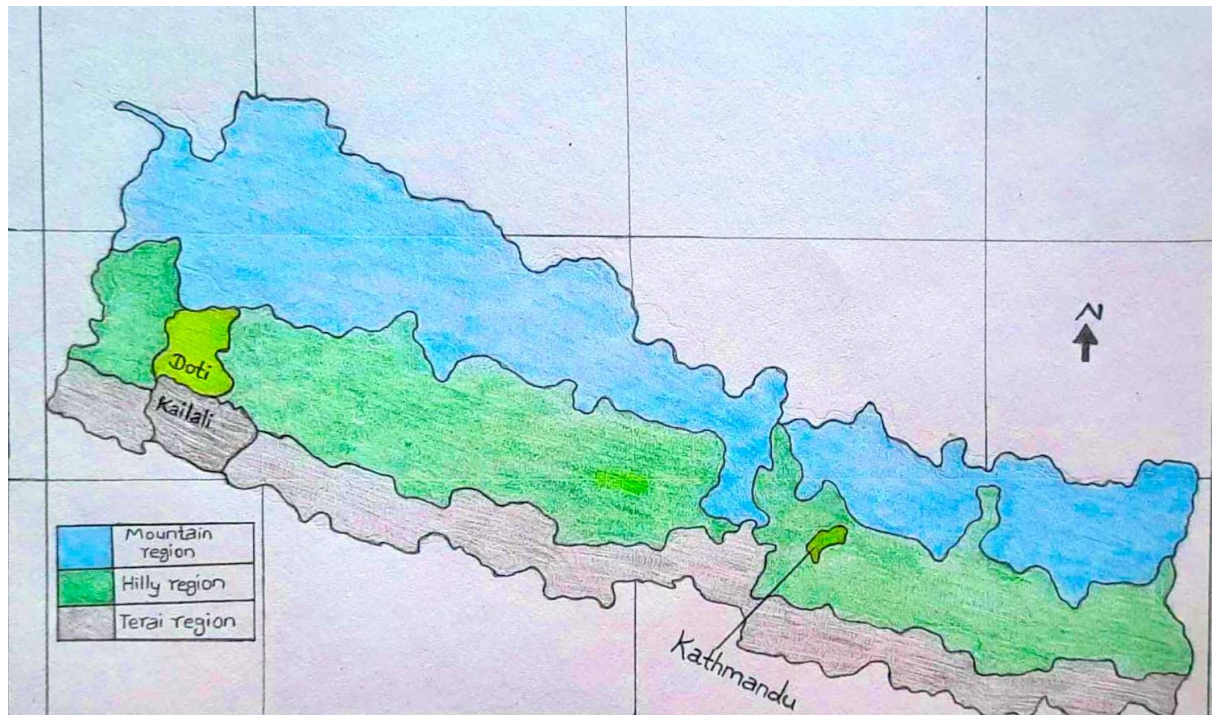


Figure 1. Kailali, Kathmandu, and Doti districts in Nepal's map made by Chetna Joshi

Turning to consider gender, I reflect that the only thing that I was familiar with as a student, and later as a teacher, were the gender patterns in the contents of the textbooks and their similarity to my experiences to some extent. As in my family, the textbook suggested that it was the father who works in the office and the mother who always cooks the food. This idea remained dominant even when I started my career as a schoolteacher. I could see that many women were involved in various professions; however, the gender patterns represented in the books were still the ones from the past. Male figures were more frequent in the textbooks than female figures, and none of my teachers, neither male nor female ever questioned this tendency. These gender perceptions were normalised in everyday life, and I never became critical of them until my university education. At university, I realised that the content of the textbooks works like a “hidden curriculum”

(Blumberg, 2015; Gouvias & Alexopoulos, 2018) for gender socialisation and can have serious implications. I felt that our textbooks needed to be examined critically and that the teachers should intervene in challenging the stereotypical gender representations for gender parity, and advocate for policy reforms as recommended by Rae L. Blumberg (Blumberg, 2015). However, this would be hard to achieve without some research within the Nepalese context. I found that there was little research in Nepal on textbooks addressing this issue of gender. When I became a lecturer at the university, I realised I had the opportunity to do something in this field. The recent social changes in Nepal gave me the impetus to develop ideas for a study.

1.3 Opportunities for Social Change in Nepal

Being one of the oldest South Asian countries with a history of many political and social movements in a short period of time (Lawoti, 2015) Nepal has gone through various transformations. The biggest achievement so far is the new constitution of 2015 that formally abolished the monarchy, established Nepal as a federal republic state, and as a secular nation. Although some studies suggest that the present constitution still contains biased legal provisions favouring Hinduism and male-oriented citizenship laws (Allison, 2017; Lawoti, 2015), the social and political changes brought about by this constitutional change cannot be ignored. The present constitution has made some remarkable amendments in the law regarding gender equality such as the amendment giving rights to hereditary property for females, and the provision of the inclusion of the mother's name in the citizenship certificate (Secretariat Constituent Assembly, 2015). "Of particular relevance is Part 3, with its focus on rights, including the Rights of Women (para.38) and the Right to Social Justice (para 42), as well as the Directive Principles (para 50) which place an emphasis on 'the norms and standards of rights and human rights' including gender equality and social justice" (Secretariat Constituent Assembly, 2015). "As a result, there have been changes in social and educational policies. It was expected that the newly produced curriculum and textbooks will have acknowledged these changes and changed the course contents promoting gender parity. However, it remains unclear as to what extent these changes are acknowledged by students as reflecting the reality of their everyday lives.

To maintain uniformity in education across Nepal, the textbooks are regulated and published by a central agency named Curriculum Development Centre under the Ministry of Education, Science and Technology (Government of Nepal, 2019). These centrally regulated textbooks are used all over Nepal. The complete curriculum change happens once in a ten-year period, and in between the curriculum changes there is general moderation every year and curriculum updates in every five years' time. In recent times, some changes have been made in the content of the texts, but the focus is on the changed political scenario rather than on socially motivated issues. In 2019 the curriculum changed after a major political change and the promulgation of a new constitution in 2015. This intrigued me to explore the gender patterns in the textbook illustrations, especially the change seen in the old and new curriculum textbooks.

1.4 Research Questions

I wanted to critically explore the gender aspects in the newly published primary school textbook images of Grade 1 in relation to previous Grade 1 textbook images.

Additionally, I wanted to relate my project to the students as they are the targeted audience of the textbooks. By doing this, this research aims to make practical and policy recommendations to address the gender biases that exist within the text reviewed. Based on these concerns, I developed the following research questions for this study:

1. What is the gender context in the newly implemented educational materials in Nepal?
2. What are the changes seen in gender roles, gender relations, and other activities on the cover images of the previous and current textbooks?
3. How do Grade 1 students represent gender and other content in their own drawings of cover images and describe them in interviews?
4. What gender activities are represented in their favourite images chosen by Grade 1 students and described by them in interviews?

These research questions are significant for exploring the gender context in the newly implemented educational materials in Nepal. Additionally, it is important from the perspective of understanding young minds and their gender internalisations through the own selection of their favourite illustration to their drawings of cover images. Moreover, these investigations are central to understanding of the newly produced national curriculum (Government of Nepal, 2019) and the newly implemented constitution (Secretariat Constituent Assembly, 2015), with its emphasis on gender equality, are represented in the textbooks. This study has the potential to help understand the changes in gender equality policies implemented in educational materials. Though with limited student participants on account of Covid-19's impact, this study presents how participants from multiethnic and multiregional backgrounds respond to the same questions and indicates what their responses might suggest about their backgrounds.

1.5 The Significance of this Study

Although there are many studies in gender representation in textbooks around the world, Nepal has limited studies in this field. The studies that have been conducted in this field were carried out some years ago and suggest gender bias in the textbooks' depiction of males and females (Joshi & Anderson, 1994; Shrivastava, 2006; Rothchild, 2007). The findings in other parts of world also found female underrepresentation in textbooks (Blumberg, 2015; Gouviassa & Alexopoulos, 2018; Kostas, 2019; Hunter et al., 2005; Fadhila, 2022), with more males in occupational settings (Gouviassa & Alexopoulos, 2018), more females in the household chores and indoor settings (Kostas, 2019), lack of female role models (Gebregeorgis, 2016), and male dominance in sports (Chick et al., 2010; Koss, 2015).

This study uses the gender theory of Connell (2002), who defines gender as being constructed through social relationships, rather than biology. According to her, the understanding of gender and the differences between males and females is a process that is passed on to the young generations as they grow up. For Connell, gender is not just enforced from the outside but also something agreed upon by the people who take on

gender roles and relations willingly. Connell's gender lens looks at the gender outcomes on both males and females. She also claims that the social institutions such as educational institutions contribute to maintaining the gender order. Connell is optimistic about the end of gender-based discrimination with social efforts and changes in people's behaviour. This approach is appropriate to a study such as this, which emerges from institutional change. This study also takes Rothchild's 2007 study (Rothchild, 2007) as a reference; because she also defines gender as a process that influences various social institutions such as family, society, and schools. Rothchild's study is an important in-depth study undertaken on the issue of gender in Nepal.

This study is different also because of the methodological approach it takes. It uses a well-tested participatory case study approach, with its multiple sources of data and multiple methods of data collection; however, it is unusual in its approach to data analysis, using social semiotics to explore gender in textbook images and children's images. This approach allows the data to be interpreted in its social context, eliciting meaning from images and text. Setting it apart from the approach of other studies on textbooks, this research's use of social semiotics to explore gender in textbook images and children's images distinguishes it from other such studies in this field.

Professionally, as a lecturer in English, working at Tribhuvan University, this study is important to me as a researcher, as its findings will be taken on board by my fellow educators, and have immediate practical application. My profession allows me to reach out to university graduates and university professionals with whom I can discuss the issues of the representational aspects of teaching materials and their potential impacts. Discussion on such topics makes them aware of such issues. I will also take part in conferences in Nepal to discuss my findings. The dissemination of such findings also makes individuals aware of the impact of textual materials and their contents, for many of the university professionals in Nepal are involved in writing textbooks. My research can contribute to providing them with critical comments regarding representational issues in textbooks and their potential impact on children. This research can also be useful for the staff of the Curriculum Development Centre, Nepal, and textbook publishers, illustrators, and other textbook writers regarding the representative aspect of illustrations for better

and inclusive representations. Finally, the study will have practical application, as I will lead a discussion workshop on gender representations in textbooks for schoolteachers in Nepal starting from the schools from where data was collected as a process of sharing knowledge. This will empower and enable them to encourage their students to discuss their textbooks critically to promote learning.

1.6 Summary of Chapters in this Study

This thesis comprises seven chapters including this introduction. The other six chapters are the review of literature, methodology, two chapters on findings, a discussion chapter, and at last, a concluding chapter.

The literature review chapter presents the context of the study, both socially and conceptually. It provides an overview of the social policies deriving from Nepal's new constitution and studies of the educational situation of the country. It then presents a detailed review of the studies related to school textbooks that focus on gender issues, images, and students' responses to them in various contexts both in Nepal and globally. This chapter also highlights the methods and methodologies used by the previous studies in this field. It situates the current research among similar studies regarding gender issues in textbooks and students' responses, especially in regard to textbook illustrations. This chapter leads this study toward its conceptual lens, and the methodological approach informed by the literature is set out in the next chapter.

The Methodology chapter is led by the research questions around the exploration of gender patterns in the textbook cover images across the curriculum and in the images drawn by Grade 1 children and their interview responses. Guided by the nature of this exploration, this chapter presents the research as a qualitative study and interpretative in nature (Saldana & Omasta, 2018). This research looks upon the gender patterns starting from the cover images from previous and current curriculum textbooks along with the responses from students in Grade 1 in the context of changed education policies, research reports from the government, and current constitutional changes in gender equality

policies. Within the qualitative research approach, it adopts a multiple case study method as described by Creswell & Poth (2018). This research involves data from multiple sources: young students from two schools located in two distinct geographical settings (Kathmandu and Kailali), educational documents including textbooks, and government reports, along with new constitutional provisions regarding gender parity. Since young children studying in Grade 1 are the participants in this research, various activity methods such as image making, image selection, and short interview methods were used for data collection. Under the social semiotics approach (Kress & Van Leeuwen, 2006; Rose, 2016) this research adopts compositional interpretation and content analysis as the data analysis methods to unearth the gender patterns in the textbook illustrations and children's responses. Additionally, this chapter describes the ethical procedures set in place for this study, along with the researchers' own positionality as an insider/outsider, and the limitations of the research. Moreover, it highlights multiple data sources, data collection methods, and data analysis methods contributing to data reliability (Creswell & Poth, 2018). In other words, this chapter presents all the systematic procedures applied in this research from the research type to data analysis methods.

Following the methodology chapter, there are two findings chapters that answer the research questions relating to two sources of data: the representation of gender on the textbook cover images, and the gender patterns seen in the images drawn by children themselves. The findings reveal that gender equality policies introduced after the change in the Constitution of Nepal in 2015 have impacted the cover illustrations suggesting minimum gender patterns but gender bias is still reflected in the textbooks with the illustrations showing male dominance in professional occupations and outdoor activities, and female dominance in indoor and household activities. The illustrations also suggest that they are reinforcing the conventional gender appearances such as gendered hair length norms and gendered clothing in male and female characters. This chapter reveals how Nepalese cultural aspects, especially those of the hilly region are reflected in the settings of new cover images.

The second findings chapter deals with the findings from the children's own drawing and their interview responses. This chapter also presents a comparative analysis of the gender

patterns in government endorsed textbooks and government published textbooks as the children in the private schools were using government endorsed textbooks rather than government published textbooks. This chapter shows how gender patterns like household roles and indoor settings are more linked with the females as compared with males who are dominant in occupations and outdoor activities matching with the textbook illustrations. The finding from the children also suggests that there is greater uniformity in the content rather than diversity informed by the children's distinct cultural backgrounds, indicating the effect of uniform education policies in Nepal, and possibly the influence of westernisation across Nepal. The gender patterns found in the children's responses are later contextualised with the overall textbook illustrations and linked to the wider gender and educational policies.

A discussion chapter follows the chapters on findings. In this chapter, the Findings are linked to the concepts that informed the research questions, the analytical tools that underpinned the study, and the findings from other studies in the field. A key point emerging from this study, based on the analytical approach of Kress and van Leeuwen (2006), is that the cover images can be seen to present the ideal gender conditions of the new Constitution adopted in the curriculum revision, with a minimum difference in gender patterns, whereas the desired images drawn by children and their interview responses explaining their own drawing suggest the realities gender in the context of their everyday lives. This chapter also details the western influence in the clothes of younger characters in illustrations, and a uniformity on the cover images rather than a multiplicity informed by the multiethnic, multiregional, and multireligious nature of Nepal. The impact of this is that the children appear to ignore local knowledges that might be expected to represent their diverse ethnic and regional backgrounds. Lastly, this chapter presents how this study is methodologically unusual in using social semiotics (Kress and van Leeuwen, 2006; Rose, 2016) as an approach to explore gender in the Nepalese social context.

Finally, the conclusion chapter summarises the overall thesis. This chapter emphasises the study's theoretical, methodological, and practical contributions. Theoretically, this research contributes to the field of gender in education in the changed social political

scenario of Nepal. Methodologically, this research contributes to the field of social semiotics by using this approach along with multiple data sources, multiple data collection methods, and multiple data analysis methods to explore gender in illustrations. Practically, this study will contribute to the field of gender parity through education in Nepal by arousing discussions among stakeholders in education regarding the representative aspects of illustrations, especially gender. This study also expects to inform textbook publishers, writers, illustrators, educators, and other stakeholders about the implications for students' learning. It also sets out suggestions for further research.

2. Literature Review

2.1 Introduction

This chapter is divided into two major sections. The first section sets the background on the social context of gender in Nepal, and recent changes in Nepalese social and political contexts including the change in the constitution influencing the national social and educational policies. The second section presents a detailed review of the literature concerning the textbooks in international and Nepalese contexts. This chapter concludes by demonstrating a research gap in the current studies and positioning this study within that space.

2.2 Gender and Context of the Study

Gender discrimination is one of the hindrances in achieving social justice in Nepal because of its long patriarchal traditions. Discrimination against women in Nepal has been structural and embedded in cultural values and practices (Gupta et al., 2021; Pokharel, 2008). The social gender norms, patriarchal social structures, and law have simultaneously supported each other to weaken women's position in Nepal (Uprety, 2016). Males have been preferred for social, religious, and economic reasons resulting in discrimination even before birth and even female feticide (Lammichhane et al., 2011). Gender inequalities could be seen in the distribution of household duties, property, economic activities, and education (Pokharel, 2008; Government of Nepal, 2011) and these discriminations were internalised and accepted by the women in Nepal (Khanal, 2018). Although gender discrimination was found more or less all over Nepal, research has found that women are impacted more by gender-based discrimination in rural areas, both among educationally disadvantaged groups as well as in the higher economic class (Gupta et al., 2021).

Gender based discrimination has affected the equal education opportunities for girls (Basnet, 2013; Khanal, 2018). Although various plans such as education for all, universal primary education, free textbooks, education for food, and so on exist at national and international levels and are implemented in the education sector to discourage gender-based discrimination in educational opportunities, the problem has not been solved

(Acharya, 2019). Even though girls' enrolment in the primary level has been improved (Acharya, 2019; Government of Nepal, 2017), the participation of females is lower at the higher-level education and this gap widens in the rural communities (Panthee & McCutcheon, 2015).

Education has always represented the state voice in Nepal and has been used for bigger motives such as for development, nationalism, promoting national history, and a national language (Bennike, 2015). The role of education for state building and producing citizens is explicitly addressed in the preface of all textbooks (Government of Nepal, 2019). Studies also suggest that education in Nepal discontinues the emphasis on local knowledges (Luitel & Tylor, 2005; Subedi, 2020; Wagle et al., 2019), and it disseminates the idea of superficial uniformity, without acknowledging the diversities in the country (Bennike, 2015; Caddlle, 2007).

2.3 Gender and Changed Educational and National Policy Context

There have been major changes in the social and political system in Nepal in the past ten years, including the change in the constitution which in turn has resulted in changes in social policies (Rana & Koirala, 2021). The major changes in the Constitution that are significant from the point of this study are the changes in terms of gender equality along with the equality of disadvantaged groups as gender intersects with both these groups in terms of the changes regarding education.

The new constitution of 2015 makes important statements and changes to the law in favour of gender equality. It foregrounds the elimination of discrimination based on gender, along with other forms of social discrimination in its preamble (Secretariat Constitutional Assembly, 2015). Under the fundamental rights, it mentions the right to equality, equal right to parental property, and denounces all types of discrimination. It also ensures the special protection of the right of citizens that have been deemed socially, culturally, and religiously discriminated against including women, *Dalits* (the caste group lowest in the caste hierarchy), indigenous nationalities, *Madheshi* (people from the plains

whose lifestyle is different from the Hilly people), *Tharu* (An indigenous tribe in western plains), and Muslims. Further, there is a separate mention of the rights of women, the rights of the child, and the rights of *Dalits*. Moreover, the right to social justice and right to social security also guarantees the rights of women and other disadvantaged groups to access opportunities and participation in state building. Additionally, the directives and principles in the constitution prioritise human rights, gender equality, proportional inclusion, and participation as political objectives, and elimination of all forms of discrimination, exploitation, and injustice as its social objectives. Similarly, the policies relating to social justice ensure special arrangements for disadvantaged women. This shows that the constitution has been progressive regarding the safeguarding of the rights of citizens including females and other disadvantaged groups.

Another significant feature of this Constitution is prioritising the right to education as a fundamental right for all school going students. Under this right, the constitution ensures free school education for all citizens including the right to free education up to high-school level for the citizens with disabilities. Acknowledging the status of *Dalits* under the ‘Right of Dalit’, free education with scholarships up to a higher level is guaranteed (Secretariat Constitutional Assembly, 2015).

Following these changes, there have been changes in the curriculum in 2019, echoing the greater changes in gender parity as the Constitution’s commitments. The new national curriculum framework (Government of Nepal, 2019), in its introduction, has acknowledged the new constitutional provision of education as one of the basic rights and the state’s responsibility to provide education opportunities to all citizens. There is provision of free and compulsory school education and equal reach of all citizens in education as the prioritised areas of school education (Government of Nepal, 2019).

Regarding gender parity, the curriculum has kept women at the front of the list of target groups along with other disadvantaged groups for inclusive education (Government of Nepal, 2019). In its basic principles, the curriculum mentions curriculum as gender friendly, child centred, and inclusive. Moreover, social justice, inclusiveness, and

participatory curriculum are among its principles, and the policies contribute to gender inclusion and equality in the curriculum (Government of Nepal, 2019).

Some recent studies have identified issues that need to be addressed in school education such as problems regarding the location of schools (Bajracharya, 2020), decontextualised curriculum (Wagle et al., 2019), inclusion of children with disabilities (Regmi, 2017), and change in educational materials (Bhattraï, 2020). Additionally, some studies found minimal representation of women in community education sectors and women not being recognised as parents by school management (Sijapati, 2019), and gender differences in education (Panthee & McCutcheon, 2015). However, none of these studies have addressed the recent changes and efforts of the School Sector Development Plan (Government of Nepal, 2016) and the efforts of other non-government agencies that have contributed to equitable access to education, women's participation in school management communities, increase in female attendance, and gender friendly washrooms (Mid Term Evaluation of the McGovern-Dole International Food for Education and Child Nutrition Program 2018-2021, 2021).

The national curriculum framework 2019 (Government of Nepal, 2019) is important in this context not only because it is the latest but also because it resonates with the current changes. The new textbooks for Grade 1 represent this recent change in the learning materials. This new curriculum claims to incorporate social, linguistic, and cultural diversity, and expects to develop social and moral characteristics in children along with knowledge of various topics (Government of Nepal, 2019).

2.4 Gender and Textbooks

There have been multiple studies in various locations and contexts about gender representation in textbooks. There are arguments about whether textbooks should reflect the social reality (Lee & Collins, 2010) or present progressive aspects of society (Goyal & Rose, 2020; Gungor & Prins 2011; Jabeen & Ilyas' 2012; Ullah & Skelton 2013). But there is no doubt that gender bias in textbooks contributes to gender socialisation and

hinders gender parity (Blumberg, 2015). These studies around the world can be categorised based on their findings, their country context, the textbook types, focused content (visuals, language, or both), and the methodologies they have used in their studies. Based on these categories the review of the literature below discusses the various studies on textbooks around the world. Only studies from 2010 onwards are included in this chapter to represent the more recent context of gender representation in textbooks and picture books.

2.4.1 Gender Issues in Overall Textbooks Studies

The findings from textbook studies around the world suggests a general tendency of female underrepresentation and traditional gender stereotypes (Blumberg, 2015; Chisholm, 2018; Ullah et al., 2020). The gender patterns in the textbooks also suggest males and females as binary opposite individuals rather than equally capable individuals. One of the most common representative problems regarding gender is seen in the underrepresentation of females in visuals and in language (Ariyanto, 2018; Arslan Ozer et al., 2019; Barton & Sakwa, 2012; Blumberg, 2015; Foroutan, 2019; Gharbavi & Mausavi, 2012; Lee & Collins, 2010). Other patterns include portraying more males in occupational activities than women, who are presented less, relatively, and in a smaller range of selected occupations, mostly of a caring nature (Ariyanto, 2018; Arslan Ozer et al., 2019; Barton & Sakwa, 2012; Islam & Asadullah, 2018; Lee, 2018; Ullah & Skelton, 2013). Males and females are also discriminatively presented in the outdoor and indoor spaces with more males in outdoor settings versus more females in indoor settings (Arslan Ozer et al., 2019; Javaid et al., 2020; Jabeen et al., 2014; Foroutan, 2019), more males in sports (Foroutan, 2019; T boas-Pais & Rey-Cao, 2012; Ullah & Skelton, 2013). The discriminatory representation is also indicated by the active males versus passive females (Ariyanto, 2018; Barton & Sakwa 2012; Jabeen et al., 2014; Nkosi, 2013) in their activities. Depiction of women in caring roles (Jabeen & Ilyas, 2012; Lee & Collins, 2010; Ortin & Abad, 2018; Ullah & Skelton, 2013) and their concern with appearances have also promoted gender stereotypes (Setyono, 2018). The representation in textbooks also found gender stereotypes in appearances due to gendered hair length and clothes

(Arslan Ozer et al., 2019; Yang, 2016). Moreover, gendered use of colour (Ortin & Abad, 2018; Yang, 2016) is also one of the issues found in the textbooks.

In the language used in textbooks, more male pronouns and nouns (Ullah & Skelton, 2013), the use of masculine pronouns for generic representation (Barton & Sakwa 2012; Barton & Lydia, 2012), and male firstness in paired nouns (Foroutan 2012; Gharbavi & Mausavi's 2012; Islam & Asadullah 2018; Lee 2018; Lee & Collins 2014) suggested the secondary position assigned to women. Underrepresentation of females is not only limited in the textbook contents, but also in the authors of textbooks (Jabeen, Chaudhary, & Omar, 2014; Javaid, Jabeen & Omar 2012; Ullah & Skelton 2013;).

Though gender bias in textbooks is a universal problem, the intensity of gender bias in textbooks varies according to the school level, places, subjects, and publications. Studies claim that gender stereotypes were more in higher level textbooks than the lower levels (Foroutan, 2019). It was found that the textbooks in developed parts of the world with less gender disparity have shown some improvements in the minimisation of textbook gender issues, however, developing countries have just begun to focus on this issue. Thus, the intensity of gender bias in the textbooks also reflects the intensity of social gender bias in that country (Blumberg, 2015). Also, gender bias varied according to the publications (Chick & Carole, 2016) and textbook contents (Foroutan, 2012).

2.4.2 Gender Bias: Developed and Developing Nations' Context

The majority of studies have taken place in the developed world regarding gender representation in textbooks, however, there are fewer recent studies on this topic. Although gender issues remain in the textbooks of developed nations, the findings reveal some improvements such as use of gender-neutral words, the use of gender-neutral titles, reduction of generic male pronouns, use of both masculine and feminine pronouns, and use of neutral pronouns.

Among studies in the developed world, Lee and Collins (2010) present a comparison between Australian and Hongkong's English language textbooks. The finding from this study suggests women's underrepresentation in both written and visual texts, women's dominance in nurture roles, male dominance in varieties of occupations, sports, and male firstness in paired nouns maintaining traditional stereotypes. A recent study in Poland also suggests the prevalence of gender stereotypes in English as Foreign Language textbooks taught in schools at various levels (Pakula et al., 2015). Biemmi (2015) found that textbooks in Italy contribute to transferring gender attitudes to the learners. Gender biases were spotted in the textbooks of various countries like Korea (Song, 2013), Finland (Sarikivi, 2012), Japan (Lee, 2014; Lee, 2016; Lee, 2018), Iran (Amerian & Esmaili, 2014), Hongkong (Lee, 2014; Yang, 2011), Greece (Gouviassa & Alexopoulos, 2018; Papadakis, 2019), United States of America (Chick et al., 2010; Koss, 2015; Lucy et al., 2020), Turkey (Atay & Danju, 2012; Kahveci, 2010; Kizilaslan, 2010), Guam (Hattori, 2018), Spain (Kahveci, 2010), and in UAE (Cobano-Delgado & Llorent-Bedmar, 2019). Esteves (2018) commented on Portugal's legislation, curricula, and textbooks as being pro male because of its language that addresses the students as generic males. Kuhar and Ales (2017) spotlight another issue such as the anti-gender movements in Europe by parents who strictly scrutinise textbooks contents for including gender theory and sexual content in school textbooks which they believe is undermining traditional family values. These studies suggest that gender issues are equally present in developed countries.

Developing countries have more recently started investigating the textbooks from a gender point of view. Iran has had a large number of studies by a range of researchers (Ahour & Zafereni, 2016; Amerian & Esmaili, 2014; Amini & Birjandi, 2011; Divangahi, 2020; Foroutan, 2012; Gharvi & Mousavi, 2012; Hall, 2014; Lee & Mahmoudi, 2020; Marefata & Marzaban, 2014; Salami & Ghajarieh, 2016) who have all found similar issues around gender representation. Other studies are from various country contexts such as Bangladesh (Asadullah et al., 2018), Indonesia (Agha et al., 2018; Setyono, 2018; Setyono & Widodo, 2019), Pakistan (Khan et al., 2014; Ullah & Skelton, 2013), Jordan (Kayed et al., 2018; Nofal & Qawar, 2014), Morocco (Cobano-Delgado & Llorent-Bedmar, 2018), Philippines (Curaming & Curaming, 2020), Uganda (Barton & Sakwa, 2013; Namatende-Sakwa, 2018), Afghanistan, (Sarvarzade & Witipks, 2017), Algeria

(Aoumeur, 2014), South Africa (Noksi, 2013) and studies from Saudi Arabia (Sulaimani & Elyas, 2018; Sulaimani, 2017) also have similar findings. Although gender representation in textbooks is investigated in many nations, there are no studies from the nations that represent Soviet socialist countries (Chisholm, 2018). All these studies claim unequal gender representations and representations reproducing traditional gender patterns in textbooks and they do not report any significant improvements in the representations as are found in the studies of the developed world.

Unlike the studies above, a study in Turkish primary textbooks found some positive androgynous representation of the character roles and no gendered colour division between male and female character portrayals (Arslan Ozer et al., 2019). In contrast to this study, another study in Turkey by Akay Sahin and Acikalin (2021) claim women's underrepresentation in visuals especially in occupations, as well as stereotypical representations of women in domestic chores and childcare in elementary and middle school social studies textbooks. This contrasting finding might be due to the result of differences in textbook subjects and publications.

2.4.3 Gender and Textbook Types

The studies of textbooks can also be categorised according to the various subject textbooks that are focused on by the researchers. It was found that English language textbooks are the most researched textbooks in gender research (Blumberg, 2015, Curaming & Curaming, 2020; Lee and Collins, 2010; Merafat & Marzban, 2014; Yang 2016). English textbooks might have been popular potentially because as an international language, these textbooks are used in various country contexts and are easily accessible to researchers using English as their language of scholarship. However, besides English textbooks, other local language textbooks are also explored by a limited number of researchers (Agha et al., 2018; Al-Qatawneh & Al Rawashdeh, 2019; Fourtan, 2012; Gouviasa & Alexopolos, 2018; Khan et al., 2014) and they found gender issues like other textbooks.

Gender issues are not limited to the language textbooks but are found in various other textbooks around the world. These textbooks include health (Deckman et al., 2018), physical education (T boas-Pais & Rey-Cao, 2012), social studies (Chick et al., 2010), history (Shocker et al., 2013; Woyshner & Schocker, 2015; Lucy et al., 2020), mathematics (Paneru, 2019), music (Bernab -Villodre & Mart nez-Bello, 2018), anatomy (Parker et al., 2017), computer studies (Papadakis, 2018), literary texts (Noksi, 2013), and science (Kahveci, 2010). This shows no textbooks are untouched by gender issues.

2.4.4 Gender and Textbook Images

The number of studies that emphasised only textbook visuals in their explorations is smaller than the number of studies exploring both visuals and language (Behnke, 2018). However, the findings of these studies resonate with studies that incorporated both visual and text content.

Among the studies that focused on textbook images, a study in the United States found an underrepresentation of women and African American women in the visuals of history textbooks (Shocker et al., 2013; Woyshner & Schocker, 2015). Though not specifically focused on textbooks, science education resources for the primary school level in the Netherlands contained female underrepresentation and gender stereotypes in the character activities in visuals (Kerkhoven et al., 2016). Some studies found an equal representation of gender in quantity but identified other gender related stereotypes such as more girls in grooming activities, mothers as carers of young children, more males as historically and socially significant figures (Deckman et al., 2018). Gender issues favouring males and reinforcing stereotypes are also found in the visuals of English language textbooks of Indonesia (Setyono, 2018), Hongkong (Yang, 2016), and picture books in the United States (Koss, 2015). Research in the visuals of music textbooks in Spain found female underrepresentation and the absence of characters with disabilities (Bernab -Villodre & Mart nez-Bello, 2018). Similarly, a study in Indonesia found that the images in textbooks maintained male dominance in the frequency of images, occupations, and activities favouring males (Elmiana, 2019).

In contrast to these studies, a study in Spain found proportionate gender representation in primary level textbooks illustrations even if the percentage of male representation was higher than females (Moreno-Fernández et al., 2019). It found that the gender roles in illustrations are evenly distributed among both males and females suggesting gender balance. Most of these studies and specifically the study in Spain are based on biological difference rather than the social construction of gender (Connell, 2002). This research moves beyond biological difference to a focus on the social construction of gender. In doing so, I recognise that what we see as a biological difference in textbook images may also be influenced by gendered social norms.

2.4.5 Gender in Textbooks and the Audiences

There are a few studies that investigate the effects of textbook content on learners (Behnke, 2018). The studies focusing on the impact of gender representations on learners have found that counter stereotypical gender representations had positive learning outcomes for girls (Good, Woodzicka, & Wingfield, 2010). Another study found that exposure to counter stereotypical representation to learners had a positive impact on their selection of toys (Spinner et al., 2018). The impacts of counter stereotypical female characters helped change the traditional gender attitudes on children with progressive gender internalisation (Ruterana, 2017). Unlike these studies, which showed a positive impact on learning outcomes, some studies found that the children depicted gendered colour patterns while choosing their picture books (Maniam, 2011). A study found that girls and boys had different approaches to the gender stereotypes in the textbooks as girls subverted them whereas boys reproduced them (Kostas, 2019). Similarly, a study in Kenya regarding students' interpretation of textbook images found that students interpret the textbook images in relation to their lived reality, and hence in order to promote gender parity through textbooks, textbook images should challenge their gendered attitude as well as be relatable to the students' living reality, unlike the images in the Kenyan textbooks that either reinforce these gendered ideas or present a foreign representation that is not relatable to the students (Foulds, 2013).

The studies that focus on children's images are even fewer, however, this does not indicate that children's images are insignificant. Rather, as the making of a text is a serious semiotic work, their images need thoughtful consideration (Mavers, 2011). The studies that have been conducted on the images of children focused on aspects other than gender patterns such as the impact of science and technology programs on children's images (Mirioen, 2006), children's ability to shift meaning across semiotic modes (Mills, 2011), their drawings of self (Gernhardt et al., 2013; R beling et al., 2011), family (Gernhardt et al., 2013), use of graphic indicators in drawings (Brechet, 2015), use of semiotic resources in their drawings (Callow, 2018), and their drawings of plants (Ahi, 2017). A study on gender in children's images found they are effective in representing their expression of gender stereotypes (Albers et al., 2009).

The studies investigating the teachers' approach toward gendered text content found that teachers were not aware of gendered content, and they even reflected gendered attitudes. A study involving both senior schoolteachers and students found that neither could identify the gender bias instances in the text (Kizilaslan, 2010). Another study concerning primary level teachers in Greece found teachers lacked training, especially in gender awareness in text contents, so did not approach the gender bias in textbooks critically (Gouviassa & Alexopolos, 2018). Similarly, a study in Nigeria also found that teachers held stereotypical gender attitudes although they denied they held such beliefs (Ifegbesan, 2010). These studies indicate that there are not only problems in the textbooks but also in the approaches to those textbooks' content by the textbook users. This study addresses this gap in the research by exploring the textbook context of gender in relation to the gender interpretation of the young children.

2.4.6 Gender Exploration and Methods and Methodologies Used

The studies in textbooks use various theoretical perspectives and methodologies to explore gender issues. Most of the studies have used content analysis under which they counted the frequencies of words and images suggesting female and male to ensure their

representation (Gouviasa & Alexopolouse, 2018; Islam & Asadullah, 2018; Koss, 2015; Lee and Collins, 2010; Taboas-Pais & Ray-Cao, 2012; Ullah & Skelton, 2013; Yang, 2016). Another common method used by the studies in exploring textbook content is discourse analysis (Al Kayed et al., 2018; Curaming & Curaming, 2020; Gebregeorgis, 2016; Salami & Ghajarieh, 2016; Setyono, 2018). By using this approach, researchers have analysed the discourse of maleness and femaleness suggested by the language and images to investigate the implied gender discourses in the textbooks. A few other emerging studies have used the Corpus method by using the computer to count the frequency of words suggesting male and female representations using a popular content analysis software (Lee, 2016; Lee 2014; Lee & Mahmoudi, 2020). Moreover, other methods such as thematic analysis (Agha et al., 2018), linguistic analysis (Gharvi & Mausavi, 2012), multimodal analysis (Marefat & Marzban, 2014), and Kress and Van Leeuwen's social actor network model are also used to explore gender (Salami & Ghajarich, 2015).

2.4.7 Gender and Textbooks in the Nepalese Context

Nepal has limited studies of gender in textbook contexts. Studies by various scholars in the past have found gender stereotypes and female underrepresentation in the Nepalese school textbooks (Joshi & Anderson, 1994; Rothchild, 2007; Shah, 2016; Dhungel, 2016).

A recent study in all mandatory textbooks of Year 4 and Year 5 found female underrepresentation and gender stereotypes in all textbooks (Paneru, 2019). However, unlike the previous study of Joshi and Anderson (1994) this study found fewer stereotypes in Mathematics and Science textbooks (Paneru, 2019). The findings included a mismatch between illustration and text content, female's depiction in domestic and familial roles, absence of women role models, and underrepresentation of women as textbook writers against males as influential personalities, possessors, decision makers, and textbook writers (Paneru, 2019). This study also argues against the normalisation of

males as criminals, drug addicts, alcohol abusers, smokers, sick, and wounded as only males were depicted in such situations.

2.5 Research Gap

This review of the literature has shown a number of gaps and also opportunities for new research. Firstly, based on the studies described above, it can be seen that the studies of images to explore gender are relatively fewer than the studies that incorporate both visuals and language content (Behnek, 2018). Secondly, although there are studies that include the policy context and gender representation in textbooks (Blumberg, 2015), the review suggests that there are minimal studies that involve both the textbook and their users in gender exploration. Thirdly, methodologically, most studies use a single method of analysis, with content analysis as one of the popular methods to explore gender. The studies that focus on the qualitative method are fewer though some studies have adopted content analysis alongside discourse analysis to conduct more in-depth exploration (Chisholm, 2018). Social semiotics seems a rare method used to explore gender in the textbook context. However, its use in this study (as described in section 3.2.3) has provided a new lens to look at the data.

In the context of Nepal, there are very few studies in gender in the context of textbooks. Even fewer focus on the images, including the cover images as an important unit of analysis. The textbook covers are taken in this research as a significant first visual encounter with the textbook that is critical from marketing and production perspectives (Sunderland & McGlashan, 2013). The studies that have been conducted until now do not take into account the new curriculum and the context of a changed political and social scenario. There have been no studies in gender context involving young students as participants either.

2.6 Conclusion

This study aims to fill the gap in current studies on gender in textbooks and students' contexts in Nepal. It begins with the context of recently published textbooks after the major political and social changes; it then focuses on the cover images in the new textbooks across the Grade 1 curriculum, and situates the findings in the new curriculum documents, educational documents, and other policy document contexts. It presents a comparison between these government published textbooks and the government endorsed textbooks used by Grade 1 children. The study also includes images chosen from the textbooks by young textbook users, images drawn by them as well as interviews carried out by them. In doing so this study attempts to contribute to the field of limited gender studies in the Nepalese education field as well as to the limited textbook studies incorporating textbook users globally. Further, it uses social semiotics as an approach to reveal gender as a social construct (Connell, 2002) in the textbook visuals, a novel strategy in the field of gender in education research. Thus, this study aims to make several contributions. Firstly, it will provide empirical data on gender representations in textbooks from Nepal; secondly, it brings together an analysis of images with the perspectives of young textbook users; and thirdly, it brings an innovative approach to the analysis of data, situating the study in its social context.

3. Research Methodology

3.1 Introduction

This chapter presents all the approaches used in this study to answer the research questions. Starting from a brief discussion of qualitative research, it presents potential approaches to this study, the choice of case study as the methodological approach and then a detailed discussion on why social semiotics was selected as one of the best approaches to this study. The other sections discuss the overall data, data collection procedures, data analysis methods, ethical processes, and my positionality in this research. A conclusion to this chapter summarises the main points of this chapter at the end.

3.2 Qualitative Study

Qualitative research utilises various epistemological and ontological approaches to explore reality (Denzin & Lincoln, 2018). The objective of this research is to explore the impact of recent changes in gender and social equality policies in the cover images and within textbooks in the elementary school curriculum at Grade 1 in Nepal and to investigate how these new policies have impacted the initial school-going children's gender attitude. In doing so, this research investigates the social gender contexts represented in the given covers, the illustrations drawn by Grade 1 children to represent a textbook cover, and their interview responses in the context of larger national policy documents. To address these research objectives, this research requires data from multiple sources, including textbook cover images, national and educational policy documents, images drawn by Grade 1 children, and their interview responses. These varied types of data will require multiple data analysis methods such as visual analysis, document analysis, policy analysis, and analysis of children's interviews. Denzin and Lincoln (2018) found that when research investigates 'what is' rather than 'how many' it takes the qualitative route. The nature of this research objective requires exploration of 'what are' gender social meanings reflected in the images of textbooks, children's drawings, and

their oral responses in the greater national policy contexts, demanding that the researcher to interpret the data.

Saldana and Omasta (2018) define qualitative research as research that primarily focuses on human experiences in a natural setting that is non-quantitative in nature, consisting of textual and visual materials that document human experiences in social action. This definition of qualitative research fits the present research as it explores gender as a human experience reflected in the textual as well as visual data from various sources and interviews participants in their natural setting. Qualitative research also acknowledges the various ontological and epistemological positions and values adopted by the researcher (Denzin & Lincoln, 2017). It denies the possibility of value-free objective research as it acknowledges that both the researchers and the participants are situated within a certain context with certain values impacting the research (Creswell & Poth, 2018). This research draws on my experiential knowledge as a school student, school educator, and as a Nepalese person with knowledge of the specific areas where data have been collected.

Qualitative research applies an interpretive approach that strives to gain a better understanding of the phenomena that are being investigated, often taking multiple interpretive practices (Denzin & Lincoln, 2018). Each interpretive practice offers different ways of viewing reality that can be altered when a different interpretive practice is used (Denzin & Lincoln, 2018). By exploring the gender meanings in the textbook images and children's responses within larger policy contexts, this research also strives to get a better understanding of the perceptions of gender in these textbooks, and in the context of children from different backgrounds. The researcher makes no claim that this study is generalisable, nor that it is the only way to interpret the data. It offers one way of viewing gender as the social norms regarding roles, activities, appearances, and relations (Connell, 2002) in the Nepalese context that may be challenged when a different interpretive approach is used to explore this phenomenon.

3.3 Potential Approaches for this Research

Among various approaches, the ethnographic approach, critical discourse analysis, and case study approach were the potential epistemological approaches of inquiry for this research. Ethnographic research is appropriate when an extended narrative about culture is required for research objectives (Saldana & Omasta, 2018). To investigate the gender context on site in an educational institution and the greater policy context, an ethnographic approach would demand in-depth data collection from various sources such as education documents, school settings, and policy documents. It would also require field data collection using various methods such as document analysis, class observation, observation of school organisational management, and interviews with parents, students, and even with teachers. Since exploring such a huge data set was not within the scope or viability of this study due to the limited time and resources, this approach was not adopted in this research. Moreover, I wanted to explore gender representations, especially through textbook cover images; that is to say, to take a narrow and more focused approach to the study. Even if I had wanted to take this approach, extensive field visits would have been impossible due to COVID-19 restrictions. Thus, this approach was not adopted in this study.

Similarly, a discourse analysis methodology would have been another appropriate methodology to investigate gender aspects in the textbook images and policy contexts. Discourse Analysis basically focuses on language elements to explore meanings of human relationships, culture, identity, politics, and power (Saldana & Omasta, 2018). Although images can be expressions of language, the focus of this study was only on visual expression. Further, in its approach to gender, this study was not directly concerned with power imbalances in society; rather, it adopts an equality perspective to gender, while investigating the meanings of images in the textbooks within a larger policy context. Thus, critical discourse analysis was not chosen for this study.

3.3.1 Case Study

The Case study method is appropriate for an in-depth study of social phenomena in their natural setting (Denzin & Lincoln, 2018). It is one of the methods within qualitative research that is used when it is possible to set clear boundaries around the focus of the study. The speciality of the case study lies in its delimitation of the study area either with a single bounded system (a program, a group of learners) or with a multiple bounded system (more than one program or group) (Merriam & Tisdell, 2018).

The case study method is differentiated according to the number of cases included in the study as a single or multiple case study (Yin, 2003). A single case study includes one case whereas, a multiple case study or collective case study incorporates more than one cases (Creswell & Poth, 2018). The present study adopts more than one cases informed by the sites of participants' locations and hence, this is a multiple case study. Lastly, a case study relies on multiple data sources such as observations, interviews, audio visuals, documents, and reports for an in-depth understanding of the cases (Merriam & Tisdell, 2016). Thus, this study also incorporates multiple sources of data collection informed by the participants' sites.

The case study method used in this research is appropriate for exploring the research questions in this study. The focus is on textbooks and the Grade 1 children who use them. Within that context are the three distinct aspects of the study: changes seen in the cover images across the curriculum; students' understanding of gender and social aspects in their drawings, selected images and interview responses, and the gender and other social equality aspects as seen in the national policy context. The policy documents from the government that contextualise this study are the documents that apply to overall school education policies in Nepal. The two different schools, locations, participants, and the textbooks produced in Nepal are regulated under these policies.

The cases included in this study and their boundaries are as follows. This is a study of gender in texts used in primary schools in Nepal and the understanding of the covers and illustrations in these textbooks by Grade 1 children. Thus, the case is bounded firstly by curriculum textbooks: the curriculum textbooks used in Grade 1 until 2018, and the curriculum textbooks used from 2019 onwards are the focus of this study. To put the cover images in the overall textbook image context, other illustrations from the

mandatory textbooks developed by the Curriculum Development Centre are also included.

Secondly, the case is bounded by the participants, the audience for the textbooks, or the Grade 1 students. Participants were selected from distinctly different locations in order to bring variation in data informed by their distinct geographical locations and diverse lifestyles. These locations are Kailali district and Kathmandu district. Kathmandu and Kailali are also distinct from the development aspects. Kailali lies in the periphery, in the far western province, away from the centrally located Kathmandu district. My familiarity with the locations and lifestyles was the main motivation to choose these locations. I was educated in a similar school using English medium, and I had been a teacher in similar types of schools selected in this study. A private school from each site was chosen because of the availability of technical resources for online data collection and also because I as a student and as a teacher in schools of this type was more familiar with the private school education system. Altogether five participants from each school were chosen for this case study. The participants were chosen because of their differing ethnic origins; more details are provided below. The children were given tasks to complete and were asked to talk about their work on these tasks in an interview.

Thirdly, the case is bounded by its social context; in this case, national policy level documents such as the new constitution of Nepal published in 2015, and the education documents such as the national curriculum, and the primary curriculum. These documents, including primary education policies, gender, and other social equality aspects set the framework for the textbooks as well as for the social world in which the Grade 1 students live.

The complexity of these cases is brought out through the use of social semiotics as an approach to the analysis of the data. This research is marked by the three sites of social semiotics (site of production, site of the image, and site of the audience) and also by the site of participants (two schools in two distinct locations). Because of its significance to this study, social semiotics is described in the following section.

3.3.2 Social Semiotics

One of the potential approaches for investigating the data in this study is Social Semiotics. It is the study of meaning. It underpins the idea that all meanings are cultural meanings (Kress & Van Leeuwen, 2006). The term ‘social’ in social semiotics also indicates the importance of social context in meaning. Thus, this approach analyses meaning of any semiotic resources in relation to their social context (Van Leeuwen, 2005), for without the context, meanings of any semiotic resources are incomplete (Kress and Van Leeuwen, 2006; Rose, 2016;).

Social Semiotics is the study of various types of social signs; however, it is mostly popular in visual studies. This approach claims that visuals are intended, and they have social effects (Kress & Van Leeuwen, 2006; Rose, 2016) and thus they are important. Images represent, argue, and persuade the viewers; thus, they are powerful (Duncum, 2020). In education, they are regarded as one of the ‘powerful forms of pedagogy’ and important factors in developing curriculum, although researchers claim that they are not much explored in education (Duncum, 2020 p. 1).

Social semiotics acknowledges what Rose (2016) refers to as four sites of images that potentially affect meaning making: site of production, site of image, site of circulation, and site of audience. In each site, she proposes, three modalities exist, which are important in understanding images: technological, compositional, and audience (Rose, 2016). Thus, the producer of the image, the image itself, and the targeted audiences are important aspects of this approach within social semiotics. Images are powerful but, audiences also have the power to impact the meaning of the images (Duncum, 2020; Rose, 2016; Kress & Van Leeuwen, 2006). Semiotics regards the audience as an active meaning maker who can choose to accept, reject, or interpret the meanings in multiple ways. Since this study primarily focuses on the images from Grade 1 textbooks, especially the cover images and visuals from the children and their oral response to the visuals, social semiotics is as an appropriate method of analysis. Since all three sites are important in social semiotics, the site of image (images from textbooks), the site of

audience (response from the Grade 1 children), and the site of production (national policies and education documents) are the focus of the present study.

There have been studies of textbook images as impactful resources in learning. However, images produced by children are among one of the least researched areas (Callow, 2018). Children's drawings possess their opinions about social issues and their identities (Alber et al, 2009). Additionally, sign making has special significance when it is done by young children as they are relatively less constrained by cultural norms but restrained by a lack of resources for expressions (Kress & Van Leeuwen, 2006). Although with less power, children make metaphorical signs motivated by their interest and their social psychological state at the moment of making the sign (Kress & Van Leeuwen, 2006). Thus, this study includes children's own created images in the form of drawings for their desired cover images, as a significant site to explore their gender attitudes.

For the site of audience, this research involves children from various cultural backgrounds acknowledging the multicultural, multiethnic, and multireligious context of Nepal and probably from a similar social status as they went to similar private schools. The research also explores the potential variations in their images and oral responses informed by the children's ethnicity and culture. The site of images is chosen from the Grade 1 mandatory textbook images. The strength of social semiotics in this context lies in the idea that the social context cannot be separated from the images (Rose, 2016; Kress & van Leeuwen, 2006), thus Nepalese social cultural context along with the recent change in policies and education documents are analysed in relation to the textbook images assuming that these contexts would reflect in those images. In other words, this research explores the meanings of the visuals produced by authorities in relation to the images produced by the audiences that are equally focused sites in social semiotics (Bates, 2018; Kress & Van Leeuwen, 2006; Rose, 2016).

3.4 Data Collection

Data collection from multiple sources is necessary to create strong and credible research (Merriam & Tisdell, 2018), that accurately reflect the context of the study (Cresswell & Poth, 2018). As discussed above in the context of social semiotics, it is important to ensure that data is collected from all three sites resulting in multiple sources of data. Various sources of data collection used in this research are discussed below under the various topics.

3.4.1 Textbooks

Grade 1 textbook cover images from two curricula (the previous and the latest) is one of the sources of data collection for this study. The new textbook cover images were obtained from the textbooks section of the Curriculum Development Centre website. Since the previous curriculum textbooks' covers were not available on the website, those covers were obtained from the print versions by contacting colleagues who are educators in government schools who had copies of the textbooks no longer in use.

Another set of data was the textbook covers used in the two schools. Unlike the government published textbooks, these were government endorsed but published by different institutions. Since the participants chose data from these textbooks, these textbooks were also included in the research.

All the cover images were analysed in the context of overall textbook images. The data collection from Grade 1 textbooks' images answered the research question that requires the investigation of changes seen in the cover images across the curriculum and the representation of gender roles, relations, and activities in those images.

3.4.2 Activities with Children in Grade 1

The second source of data collection is the children who study in Grade 1. This source was investigated to explore children's drawing of cover images and their image selection of their favourite activity. Within the children's drawings and activity selections from images, their attitudes regarding gender roles, relations, and activities were explored in

interviews. Multiple data collection methods: drawing images, selecting images, and interviews, were used in this case.

Keeping the age of the children in mind, an activity focused data collection method was designed. Literature supports the claim that play-based interview methods are valuable to collect data from young children (Kolar & Juan, 2015). So, the children were asked to participate in drawing activities, and they were asked to select an image of one of their favourite activities from any of their textbooks. A short semi structured interview conducted in Nepali followed these activities to extract subjective information from the children about their drawings and selected images. The data collection procedure is described in detail in the following sections.

3.4.2.1 Let's Draw Cover Images

Let's Draw Cover Images was the first activity given to the children. This activity answers the question of how children represent gender in the given textbook cover images. Drawing activity has been regarded as one of the resourceful data collection activities among children (Mauthner, 1997). In this activity, each participant was provided a title for their mandatory textbooks (Nepali, English, Science, Mathematics, and Social Studies), and asked to draw the cover image for the allocated textbook. The participants were not asked to choose the title because this study sought to include covers drawn by children for all the mandatory textbook covers and it was assumed that children's selection of textbook titles might not represent all textbook titles. To encourage and motivate children's participation, all the participants were provided stationery such as a drawing notebook, a set of colours, a pencil, a sharpener, and an eraser. Keeping their age in mind they were provided about an hour to draw images.

3.4.2.2 My Favourite Activity Image from Textbook

The second activity designed for data collection was selecting a favourite activity image from their textbooks. This activity answers the research question regarding what kind of activity images interest children and how gender is presented in those images. In this

activity, children were allowed to choose images from any of their textbooks. This activity was designed to draw additional data regarding gender activities, relations, and roles from the participants. It is normal that young children lack enough semiotic resources to express themselves in their drawings (Kress & Van Leeuwen, 2006) and it was expected that they may or may not include human characters in their cover images. Thus, this additional data collection method was used to explore their free choices regarding their favourite activities and to see if any new insights emerged regarding gender.

3.4.2.3 Short Semi Structured Interviews

Interviews are one of the most used methods in qualitative research to gather information about the subjective opinions of the participants (Creswell & Poth, 2018). Interviews were used in this research to understand the participants' drawing contents and their verbal interpretation of gender activities, roles, appearances, and relations in drawings and activity images. The interview becomes particularly useful as a data collection method when the participants are non-hesitant and expressive; however, a shy and hesitant interviewee can generate inadequate data. As the information about the children's drawings and their understanding of the selected image was necessary, this method was used.

A short semi-structured interview followed the drawing and image selection activities. In interviews, children were asked simple questions regarding the images they had made and selected from the textbooks, focussing on the content. As children are concerned about being right or wrong while responding to questions, they were reassured that all their responses were important (Dunphy & Farrell, 2011; Ponizovsky-Bergelson et al., 2019). Participants were time and again reminded that there were no right or wrong answers so they could freely answer the way they like. Both open-ended and closed-ended questions were used in the interview. Open-ended questions were asked to get their subjective information about the image's content, activities, roles, relations, and future activities of the characters. Closed ended questions (Ponizovsky-Bergelson et al., 2019) were asked to

confirm their response. The participants were first asked questions regarding their drawings followed by the questions about their selected images.

Individual semi-structured interviews with each participant were conducted for about 10 minutes. The interview was conducted in Nepali language which later was translated and transcribed in English by the researcher.

3.4.3 Policy Documents

The third source of data was documents related to educational and social policy that represents the social context for this research. Within this, national policy documents such as the new Constitution of 2015, the national curriculum, and the primary curriculum were consulted. Along with these documents, reports by government and international agencies regarding equality issues in school education were also considered in this research. The portion that deals with gender and social equality in these documents was the focus of this study to contextualise the images and children's responses.

This material provided the national social context for the study. The textbook context of gender is analysed against the recent change in government policies. The new Constitution of Nepal 2015 (Secretariat, Constituent Assembly, 2015) along with other educational documents like the national curriculum framework (Government of Nepal, 2019), and primary level curriculum (Government of Nepal, 2019) are used as contextual documents impacting the change in textbook contents. Other human rights documents and information from gender equality documents are also used.

3.5 Data Collection Procedures

As mentioned earlier, various sources were consulted for data collection: textbooks, students, and policy documents. Among them, Grade 1 textbooks were selected for the research because, at the time of starting this research, Grade 1 was the only level in school education that had introduced a new curriculum after ten years. I wanted to see how two curriculum textbooks represented the changes in their initial cover pages. At the

same time, a new national education framework (Government of Nepal, 2019) and a new primary level curriculum (Government of Nepal, 2019) were also introduced adopting the changes in the political situation of federal government policy in education. Thus, Grade 1 textbooks, a new national curriculum framework, and new primary level curriculum documents were consulted for their equality policies. Also, the country had gone through a major transformation in its political system adopting a federal government, so the new documents were also crosschecked in reference to the new constitution promulgated in 2015 adopting the political and social changes in Nepal. All the government educational documents were obtained from the website of the Curriculum Development Centre and other documents like constitution, and other reports from the national and international organisations were obtained from the respective organisations' official websites and online sources.

The participants taking part in this study went to similar private schools in Kailali and Kathmandu. Schools in Nepal are of three types: government funded schools, community schools, and private schools. Government funded schools and community schools have minimum fees and maximum students whereas, private schools have fees of various ranges according to the facilities they provide.

The data collection from the Grade 1 students was done using both through online video platforms (Zoom) and in person field visits. As they were using government endorsed textbooks for learning, these were collected from the nearby bookstore. The cover images were obtained from those textbooks for analysis. First, data was collected in the month of April 2021 during the COVID from one of the private schools in the far western *Terai* (plains) in Kailali, Nepal. This place was selected as a site for data collection because I was aware of the cultural dynamic of this place (Brannick & Coghlan, 2007) as has been discussed in the previous section. It was also a school where I had a distant professional contact. Since the data was collected online due to the pandemic, a school with the availability of an internet facility was chosen. Keeping in mind that all the students might not have access to these facilities, and that they may not be efficient in using the equipment due to their young age, one of their teachers was requested to assist them in the school computer lab during the process of the interviews.

The data collection in the second school was done in person at one of the private schools of Kathmandu in the month of March 2022. The choice of place was again affected by my familiarity with its cultural dynamic and its distinctness, as well as my contacts in this school. These two schools were chosen with the expectation that there would be variation in the data, as the two data sites belonged to the centre and periphery of the Nepalese social context and were diverse in geographical location and lifestyles.

3.6 Recruitment of Participants

Altogether, ten students from the first year of primary level belonging to the 7-8 years age group were recruited in the study.

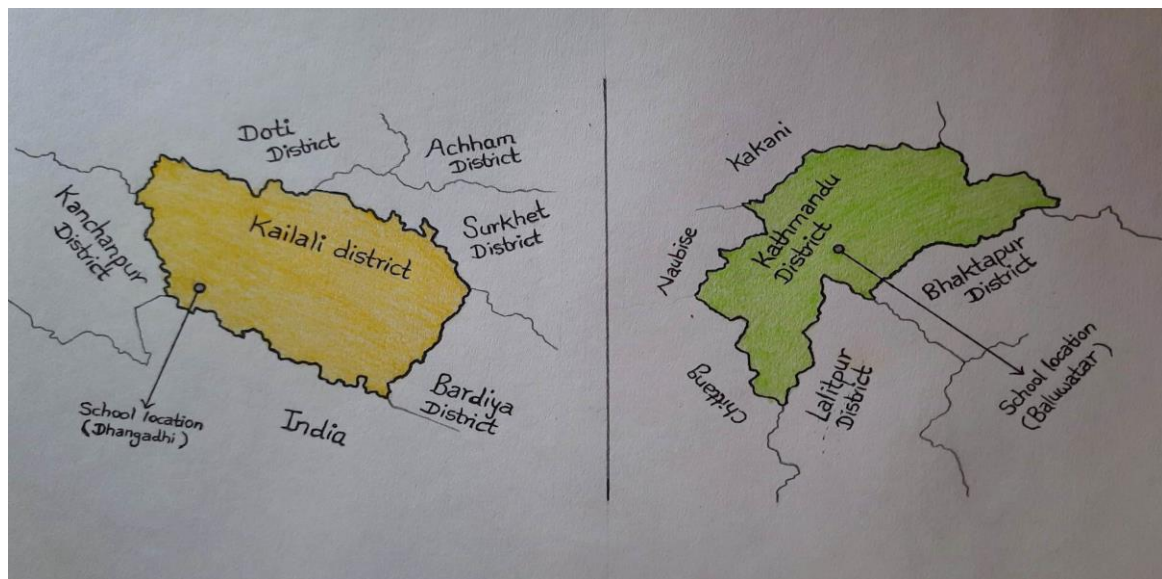


Figure 2. Map of Kailali and Kathmandu and the school locations

Geographically, participants were recruited from two distinct geographic locations: Kathmandu and Kailali. Five students from each site (Kailali and Kathmandu) took part in the data collection. Among them, five were male and five were female. The participants belonged to two distinct geographical locations (hills and *terai*). The geographical locations are one of the important aspects of Nepalese social life with distinct weather conditions – very cold in the mountains, mild in the hills, and hot in the *terai* region (plains) - that affect overall living ways and cultural dynamics specific to those places such as their language, food, clothing, and rituals.

Children from several ethnic communities took part in this research. Most parts of Nepal contain a multiethnic society although some ethnicities are indigenous to some locations. According to the government data, there are altogether 103 caste and ethnicities in Nepal (Government of Nepal, 2011). These ethnicities are important not only from a diversity perspective but also from social equality perspectives as they do not have equal social status, with Hilly Brahmin and Chhetri having been privileged for centuries (Bennet et al., 2013). These ethnicities have their own ethnic and regional languages; however, these ethnic languages are not used by younger generation due to the popularity of Nepali as an official language.

A total of 92 languages is spoken in Nepal (Government of Nepal, 2011). The official language of Nepal is Nepali, and it is spoken by 50% of total population (Government of Nepal, 2011). Education in Nepal is also provided in the Nepali language, however, the multicultural classrooms in Nepal also consist of students whose mother tongue is other than Nepali. Though education in the mother tongue up to secondary level is a right mentioned in the new constitution (Constitution Assembly Secretariat, 2015), this is not implemented due to lack of resources and multicultural nature of classrooms. This study includes children whose family names identify them as coming from Tharu (a male and a female), Tamang (a female), Kirant (a male), Dalits (a male and a female), Brahmin (two males and a female), and Chhetri (a female) communities. Brief information regarding these ethnicities is given below.

Tharu, particularly belong to the western *terai* region (Bhattraï,2008). They consist of 6.75% of the total population (Government of Nepal, 2011). They have their own ethnic *Tharu* language and a total of 5.77% people in Nepal speak this language. Traditionally *Tharu* people are farmers, however they have a history of oppression as bonded labourers of the local landlords belonging to the Hilly community.

Tamang represent 5.6% of total population (Government of Nepal, 2011). The word ‘Tamang’ means horse riders (Bhattraï, 2008). This ethnicity is indigenously located in the Northern hills of Kathmandu. They are influenced by Tibetan culture and most of

them follow Buddhism. Tamang people speak Tamang language. A total of 5.11% of the population speak this language.

Kirant ethnicity is originally located in the Eastern hills of Nepal. However, they are also one of the oldest inhabitants of Kathmandu Valley. They are Nature worshippers and warriors (Bhattra, 2008). Both *Rai* and *Limbu* belong to *Kirant* ethnicity although there is variation in their rituals and languages. *Rai* consists of a total 2.8% of the total population of Nepal (Government of Nepal, 2011). They have their unique *Rai* language however the percentage of *Rai* language speaking community is not provided in national data.

Dalits are the most disadvantage groups in the social ladder although overall *Dalits* consists of 20% population (Sonar, 2015). *Dalits* are found in both Hills and Plains, and they are often victim of social exclusion and discrimination (Biswokarma, 2023; Darnal, 2005). Because of social discrimination, a total 80% of *Dalits* live below poverty line (Darnal, 2005; Biswokarma, 2023) and the majority of Dalit children are deprived of education. *Dalits* speak various *Madheshi* (languages spoken in the Terai) and *Pahadi* (languages spoken in the hills) regional languages. The *Dalits* participants in this research only belong to Far western hills so they belong to *Doteli* speaking community. A total 2.97% of population speak *Doteli* in Nepal.

Chhetri is the largest ethnicity consisting of 15.8% of total population (Government of Nepal, 2011). They mostly speak Nepali language however their language might differ according to the region where they reside. Chhetri originally belonged to the Hilly region however, this ethnicity is scattered throughout Nepal. Chhetri are also regarded as rulers and warriors by birth in the caste system. This is one of the dominant ethnicities of Nepal and their main occupation is agriculture.

Brahmins consists of 12.4% of population and in social hierarchies they stand at the highest rung (Government of Nepal, 2011). Their language is Nepali or any other regional language belonging to the specific location. Traditionally Brahmins are priests, teachers, and sages. Brahmins conduct all the religious ceremonies and rituals They have been considered the learned population for many centuries.

Grade 1 students from these groups were selected to represent the multi-ethnic nature of the areas where the schools are located.

To maintain the privacy of the participants, the participants were given pseudonyms. The ethnicities of the children were identified from their family names which identifies their caste. Family names in Nepal are unique and carry their ethnic identity and often social hierarchies are based on these family names. However, due to the influence of the Nepali language as a national language and specific cultural hegemony over other cultures, the participants' given names did not indicate any resemblance to their ethnicity and language. As a result, all pseudonyms are names now common across Nepal.

Participant selection was guided by the process set down in the university's ethics approval process (ETH20-522) as described in section 3.9. First, an approval was taken from the selected schools. Then, potential parents were contacted by the help of the assistant teacher. The letter to parents and consent forms were sent to the parents via their children. When the parents sent back the signed consent forms, data collection activity was established with the support of the teacher. Here is brief information on the participants and their social background.

3.6.1 Participants and their Social Background

All the participants studied in Grade 1 at the time of data collection, and most of them come from middle-class backgrounds since they all are from private schools requiring monthly tuition fees of about three to four thousand Nepalese rupees (less than AU\$50) and other expenses including school annual fees, uniform, lunch, stationery, and transport costs. First, the data collection was done in Kailali and later in Kathmandu. In the first data collection, interviews were done online using the Zoom platform, and the second data collection was done in the field. Both times, a local teacher helped to distribute the stationery and provided technical support during the overall data collection period. Prior consent was obtained from the schools and parents before data collection. A brief introduction to the participants is given below.

Urmila: Urmila is a local participant from Kailali. Her family name identifies her as a *Dalit* (a community that is the most oppressed in the caste hierarchy) and her traditional family job is that of making gold ornaments (goldsmith). This caste group relatively has a higher status than the other *Dalits* because of their traditional occupation. She speaks *Doteli* dialect (a language spoken in the *Doti* district and periphery) as a mother tongue in her home but Nepali in institutional settings. I met her on 3rd April 2020 via video call and Zoom. She looked happy when she received the stationery and when answering the questions. She spoke loudly when she had answers to the questions but was quiet when she was confused about the answer.

Ramesh: Ramesh is a male participant from the *Dalit* community residing in Kailali. He came from a lineage of traditionally goldsmith occupation. His mother tongue was *Doteli* language like Urmila, but he spoke Nepali outside his home. He was vocal, clear, and smart while answering questions. He was straightforward and quite formal during the interview. I noted that he did not smile during the entire interview.

Sita: Sita is a *Tharu* (an indigenous community belonging to the western *terai* region) girl from Kailali. She was the quietest of all the participants. During the interview, I felt she was not feeling comfortable while answering questions and was not very open. When speaking she spoke in a very low voice and often nodded and shook her head for yes or no. *Tharu* people speak the *Tharu* language as their first language and Nepali and English are the second and third languages that they learn in the community and at school.

Saroj: Saroj is a *Tharu* boy from Kailali. Like Sita's family, his traditional family occupation is also farming, and he speaks *Tharu* language at home. He was loud, clear, and confident while answering questions. Among all, only his cover design represented the textbook contents as he drew various shapes on the cover design of Mathematics textbook cover. It seemed that he remembered the lesson on shapes in his Mathematics lesson. Among all the participants, he did not show any gendered attitude while talking about various roles.

Om: Om belongs to the Hindu Brahmin community of far western hills. During the interview, he was vocal, expressive, and joyful. He often laughed and expressed his acceptance and denial whenever he was asked. Since Om belonged to Far western hilly community, his traditional language is *Doteli* which is shared by all the other communities living in far western hills.

Sanjog: Sanjog belongs to a Hindu Brahmin family. His first language is Nepali. He was quite active and fast while designing the cover image and selecting his favourite image. He seemed more focused on completing the task sooner rather than being relaxed while doing the activities. He was the first to submit the cover design and he was quite happy to show the class that he had completed his task first. He also seemed disciplined as he did not talk much with his peers and sat in his place all the time while some other students often left their place to come to me and complain about others or to ask questions whether their drawing was good. In the interview, he answered quickly but only giving direct answers to the questions. He expected that I would let him go out and play after his task and I did that.

Deepa: Deepa is from Kathmandu. She belongs to the Hindu *Chettri* caste group. Her first language is Nepali. She did not seem confident about the drawing task because she looked confused and took time to draw. She might have been influenced by the participants who had already submitted their drawing, as she finished the colouring very quickly and only used brown. She was not very expressive in the interview and seemed shy, answering in short phrases and single words.

Chandra: Chandra is a participant from *Kirant*, an indigenous community. He belongs to the *Rai* clan under *Kirant* community. Chandra looked happy when he took part in the activities. He looked contained in the drawing activity and thoughtfully chose the colours. He was so much into drawing that he wanted to draw more even when all the students had already submitted their drawings. Due to time restrictions I had to tell him that he could finish his drawing and that's when he hurriedly drew box-like small houses suggesting the other houses in the community. He submitted the drawing without colouring those newly made houses.

Sabya: Sabya belongs to the *Tamang* community from Kathmandu, a group with a unique culture and language. She seemed occupied in the activities but often asked for reassurance that her drawing was going well. She was excited to show what she had done after completing the task. She might have been influenced by the drawings of her peer as she was sitting next to Prema in the classroom. She smiled during the interview and energetically answered the questions.

Prema: Prema belongs to the Hindu *Brahmin* community from Kathmandu. Her first language is Nepali. She was active and occupied in all the activities. She seemed interested, imaginative, as well as skilful in drawing as she grabbed most of her peers' attention. It also appeared that she was used to getting attention from teachers as she wanted me to see her drawing while she was still drawing and came to me when I was observing someone else in the class to tell me that she is drawing while her peers are talking and disturbing her.

3.7 Data Analysis Methods

Informed by the methods of social semiotics, compositional interpretation, and content analysis were adopted. Multiple methods of data analysis make the research strategy strong and enhance the quality of the research findings (Merriam & Tisdell, 2018). The methods used for data analysis are discussed below.

3.7.1 Compositional Interpretation

Compositional Interpretation is one of the critical visual analysis methods that looks at the images while seriously acknowledging their effects embedded in social practices (Rose, 2016). This method primarily centres around the site of the image itself and focuses mostly on the layout and design of the elements of the image. As this method basically focuses on the image itself sidelining the production and the audience aspect of images, Rose (2016) suggests it to accompany other methods. As compositional interpretation is only used as a method within the social semiotic approach, social

semiotics as an overall analytical approach addresses the limitation of compositional interpretation. Therefore, in this study, the compositional aspects of concern are those that denote some aspect of the social context and those that reference the perspective of the audience.

Compositional interpretation looks at the various elements of the image such as the content of the image, colour, spatial organisation, montage, sound, light, and expressive content (Rose, 2016); this research only focuses on the compositional aspects that are relevant to the textbook illustrations and the compositional aspects reflected in children's data. The compositional elements incorporated by this research are briefly discussed in the following sections.

3.7.1.1 Contents

Image contents are the various elements seen in the images such as characters, settings, activities, and objects depicted in the images. Image contents can be initial elements of inquiry in the compositional interpretation (Rose, 2016). Rose emphasizes sampling of specific parts of the image contents that need to be analysed. In this study, image contents such as characters, their appearances, character activities, roles, relations, and settings are scrutinised to explore gender with other social aspects represented in the images.

3.7.1.2 Colour

Colour is an important visual element in compositional analysis as it can represent objects, elicit emotions, and unify images (Rose, 2016). Colours also show distance, and increase salience (Kress & Van Leeuwen, 2016). Children can make clear choices in their use of colour and this choice often suggests a gendered selection (Mohebbi, 2014; Marshall et al., 2006; Jonauskaite et al., 2019). Several studies have identified that children understand, and express emotions through colours (Burkitt et al., 2005; Callow, 2018). Colours impact the effect of viewing images by suggesting emotions, reality, fantasy, moods, and other cultural connotations (Kress & van Leeuwen, 2006). Rose categorises colours into hue, value, and saturation. However, in this research, only colour variations used by participants are considered. Within this, change in colour use across

the curriculum covers, and the colours used by the children in their drawings are analysed.

3.7.1.3 Spatial Organisation

Spatial Organisation is the way image components are organised within image spaces providing certain values to the image components and viewing positions to the audiences (Kress & Van Leeuwen, 2006; Rose, 2016). Spatial organisations are intended and have impacts (Kress & Van Leeuwen, 2006; Rose, 2016). There are various spatial organisation strategies that show connection and disconnection, focus, and viewing positions resulting in power effects on audiences (Kress & Van Leeuwen, 2006; Rose, 2016). However, this research focuses on a few relevant aspects of spatial organisation such as internal/external viewing positions, information value, and social and shot distances.

3.7.2 Content Analysis

The content analysis method is applied in both qualitative and quantitative research. This research applies a qualitative content analysis (Stemler, 2000) method to systematically describe the meaning of various data requiring interpretation such as verbal and visual data, data that are sampled from the documents, and that are collected by the researcher such as interviews. This is a more explicit method in which the frequencies of certain visuals are often counted and analysed (Rose, 2016). Counting is important for meaning making as it records the frequencies of some elements over others and thus brings forward what is emphasised. It is applied to explore the meaning that depends on the context (Merriam & Tisdell, 2016) as in the present research. In this research, content analysis (Stemler, 2000) is used as a complementary method to compositional interpretation as the compositional analysis of the cover images alone could not detect reliable gender patterns. Thus, content analysis is used to explore the cover images in relation to the overall textbook image context, connecting the cover image contents to the wider textbook image context (Rose, 2016).

Content analysis is also used in research that needs analysis of documents to describe and interpret them in relation to a social context (Marshall & Rossman, 2016). The speciality of this method lies in focusing on specific aspects of the material rather than using the whole material (Schreier, 2012). In this research, the specific portions of national and education policy documents are analysed using content analysis to interpret the education and social equality policies. Interview transcripts are also analysed using this method to investigate the themes within them.

3.8 Data Quality

Data quality is judged by the credibility and rigour of the overall research process leading to a valid conclusion (Maxwell, 2012). Thus, a researcher is obliged to ensure the trustworthiness of the data and its interpretation by using various methods of data collection and analysis, giving a clear explanation of the research process, and acknowledging the limitations of the study.

One of the strongest methods for ensuring credibility is using multiple sources of data and a structured approach to data analysis (Merriam & Tisdell, 2016). This study applies this at three levels: data sources, data collection methods, and data analysis methods enriching the credibility and rigour. This approach allows the comparison of data from various sources, methods, and perspectives and thus avoids bias that can result from collecting data from a single source or method (Cresswell & Poth, 2018). Another method is peer examination of data and analyses. As a student researcher, peer examination of my research processes has been carried out by my supervisors who have provided comments and feedback on my processes, alongside the university's assigned panel members at various milestones.

As a work of qualitative inquiry, this research maintains its rigour by balancing the values of the researcher along with systematic research methods informed by various theories and scholarly opinions (Saldana & Omast, 2018). A detailed section that elaborately presents this researcher's reflexivity explaining my position is in section 1.2. Lastly, this methodology chapter works as an audit trail presenting all the nuances of the research,

each under a separate section, to ensure the proper track record of this research. All these aspects addressed in this research ensure that data quality and credibility are maintained.

In spite of a researcher's best efforts to ensure a high standard of quality for a study, limitations are experienced. One of the threats to the quality in this study is the limited data from participants. This threat is acknowledged in the section on the limitations of this study.

3.9 Outsider/Insider Position

Based on a researcher's prior experience in the field, a researcher can be seen as an insider or an outsider. In the present research, I am both an insider and an outsider. I am an insider because I have an extensive experience as a student and teacher in Nepali education, and I have spent a considerable amount of time in both participants' locations. For data collection purposes, a considerable understanding of the location and culture was necessary, especially given the problems of data collection during COVID. Thus, I intentionally chose locations I am familiar with, and the choice of private schools drew on my prior experience of studying as well as teaching in similar types of schools. I am also an outsider as I was exploring a completely innovative topic in the Nepalese educational field, with new insights gained from my study in Australia. I am an outsider to the participants as I was encountering them for the first time and was identified with an overseas university.

An insider's position is considered an asset because this position enriches the research with a strong understanding of the context of research (Brannick & Coghlan, 2007). It can also add to the research's credibility as intensive and long-term involvement in the field avoids false assumptions from the researcher (Maxwell, 2012). There are many benefits of being an insider in the research as they have sufficient knowledge about the context of the study, they do not face cultural shock, they can interact naturally in the field, and can have easy access to data (Greene, 2014).

Being a qualitative researcher, it is impossible to remain an absolute outsider or insider, thus many researchers remain in an in-between-space (Dwyer & Buclle, 2009). To address the insider position from the start, the researcher's reflexivity is included in the initial section 1.2 of this thesis.

3.10 Ethical Considerations

The research adhered to the ethical requirement of the University of Technology Sydney (UTS). Permission was granted by the Human Resource Ethics Committee outlining all the relevant information before approaching human participants to ensure the safety of both the participants and the researcher. As this research involved human respondents who are minors, more sensitivity was adopted while collecting data from them. The researcher sought permission from the educational institution, parents, and the participants before conducting the interviews. The right to privacy was maintained by not disclosing the name of schools or participants in this document, or in any report or publication. Informed consent (Flewitt, 2005) was obtained from the school, parents, and participants before data collection. The participants who did not show interest in participating in activities, even after their consent, were allowed to leave the data collection if they chose to. A permission letter was also obtained from the Curriculum Development Centre, to use the textbook resources on their websites. The interview data was stored securely, and was later transcribed and translated in English, maintaining the privacy of the participants.

3.11 Limitations of the Study

There were many risks while conducting research during the COVID-19 pandemic; however, plans were made acknowledging and considering these risks. Most of the risks in this study were related to the data collection from the participants during the pandemic. One of the major risks of collecting data during the pandemic was the travel from Sydney to Nepal, and other restrictions included minimising the physical contact with participants. This risk was addressed by planning an online data collection from the participants using the Zoom platform. The second phase of data collection was however

done face to face, using all the precautions required, such as sanitising, using masks, and adopting minimal direct physical contact at a school at the time when schools in Nepal had just re-started physical classes.

A potential issue arose during data collection when it became apparent that the selected schools used government endorsed textbooks rather than government published textbooks in the primary levels. As a result, the children chose images from textbooks from publishers other than the government. This was mitigated by doing an additional content analysis of the textbooks used by the participants in data collection. The textbooks images specifically based on the aspects represented by the participants and the analysis of the cover images was presented alongside the data from Grade 1 students.

Another risk factor was due to the age group of the participants as they belonged to the 7-8 years age group. First, it was difficult to convince parents about the relevance of the research and to explain the data collection procedures because in Nepal research is not common even among adults. In the first data collection, one of the children from a Dalit community did not take part in the interview even though the consent was obtained from her parents. In face-to-face field data collection, I noticed that children were not very interested in the interview though they took part in the drawing and image selecting activity. Thus, I had to shorten the interview portion spontaneously.

Another risk factor was because of the children being from different linguistic backgrounds. It is normal in Nepalese schools to have children from various linguistic backgrounds as Nepal is a multiethnic country. Some schools located in specific ethnic communities have adopted recent changes in curriculum and use their first language in school (Pradhan, 2020). However, children living in multiethnic societies, such as those where the interviews took place, study in the school using Nepali and English mediums. Children learn Nepali as a second language to communicate with people outside the home as Nepali is the language of communication in Nepal (Pherali & Garratt, 2014). Thus, participants from various communities whose first language was not Nepali also took part in the interview. As it was clear that some children were less comfortable speaking Nepali, that limited their expression. Moreover, Nepalese people are not very open to new

people, they are shy in nature, and they take extensive time to be expressive. Being an outsider for the participants might also have hindered them to be sufficiently expressive. Additionally, they were just in the first year of school lacking sufficient language expressions. The online data collection was another challenge in Nepal as Nepalese are not very proficient in using technology and most of them cannot afford technical resources to take part in the online interviews. Even though it was expected that the data collection from the children would be challenging due to the above-mentioned reasons, the actual data collection itself was a draining experience. The schools agreed to allocate a teacher who would assist with technical and other coordination during the data collection from the Grade 1 students and that was also demanding. The presence of the teacher might have impacted the student's expressions if the teacher were controlling in nature as generally found in Nepalese classrooms.

For the face-to-face data collection was relatively easy to get permission from the parents. However, it was noted that children took a much longer time than expected in drawing images and their working pace varied. Even if they agreed to take part in the data collection, some of them were not focused, or wanted to go outside to play, eat snacks in between, wanted to do something else or stop the interview and leave. In this case, the students who did not show interest in taking part in the activities, even in the middle of data collection, were allowed to do so. As mentioned above, it was noticed that they were especially not interested in taking part in the interview. During interviews, they were less expressive potentially for a number of reasons. The participants thus answered in short sentences, single words, gestures like nodding or shaking head, and so on.

Anticipating the nature of children and the limitations that might be imposed on the study, an activity centred data collection method was adopted making interviews just a complementary method to extract limited data basically focusing on the image contents. The interview questions were asked in a way not to influence their attitude. My influence was also minimised in activities as they were allowed to draw whatever they liked for the cover image of the allocated title, and select images with the activity they liked. Multiple methods of data collection (drawings, selection of images, and interviews) were used to ensure rich data from the children of that group.

It was also expected that during the pandemic, the parents would be facing economic problems and children might not have sufficient materials to take part in the data collection. Thus, all the necessary stationery (a sketch book, a pack of crayons, a set of colour pens, a pencil, an eraser) was provided to each participant. It was expected that this stationery would also motivate the participants to happily take part in the data collection. To make both the participants and parents assured about the safety of the participants, the data collection activities were conducted at school premises, in their own classrooms, and in the presence of their local teacher.

Another limitation arose from assumptions that had been made about the cover images and the use of compositional analysis. The analysis of the cover images, which had anticipated imbalances in gender representation, found very few gender disparities. It was partly due to the technological advances in the publication process and partly due to the impact of stronger gender equality policies. This limitation was already addressed by the decision to use content analysis to explore gender patterns and to extend this analysis to the illustrations throughout the textbooks.

Despite all the efforts and precautions, the findings of this research is limited to the perceptions of the participants in this case study. However, the patterns emerging from this research would help to initiate a larger research project in similar or different contexts. Extensive research is required to make generalisations.

3.12 Conclusion

The sections in the methodology chapter elaborately discussed the overall research design. This chapter clarifies that it is qualitative research and that it used the multiple case study method. The chapter presents the use of multiple sources of data and various approaches to data analysis as special strategies to maintain data quality. The chapter further briefly talks about data collection procedures, the researcher's own positionality as an insider and outsider, and all the ethical procedures that the researcher adopted. Not only that, it also explicitly presents the limitations of the research and new insights that

the researcher got during data collection. In conclusion, this chapter presents details of the rigour in the methods, processes, and methodologies used in this research.

The next two chapters mark the findings from the research from both the cover images across the curriculum and from the children.

4. Cover Images Across the Curriculum: A Comparison

4.1 Introduction

This chapter analyses cover images of year one mandatory textbooks belonging to the current and previous curricula. There were five mandatory textbooks in the previous curriculum with Nepali, English, Mathematics, Social Studies, and Science contents in separate textbooks; however, the current curriculum has included Science in the *Hamro Serofero* (Social Studies) textbook (Government of Nepal, 2019) making the number of textbooks only four. Thus, there are altogether nine mandatory textbooks belonging to the previous and new curricula. All these textbooks are government publications, published by Curriculum Development Centre (CDC), Ministry of Education, Science, and Technology. The textbooks published by CDC have been purposefully chosen because this is the central authority responsible for publishing and regulating all other textbooks publications in Nepal. Also, the textbooks published by CDC are distributed all over Nepal making them the most used textbooks in Nepal.

This chapter primarily focuses on the cover images of textbooks as an important and representative image selected by publishers for the textbook (Sunderland & McGlashan, 2013). The analysis of the textbook covers across the curricula will focus on the exploration of the gender pattern on the cover images in relation to overall textbook images.

4.2 A Brief Overview of the Cover Images

This section presents a short description of the nine cover images belonging to both previous and current curricula along with the respective cover images. The description starts with the cause of variation in the images due to technological shifts (cf Rose, 2016) and further presents an account of image contents focused by the cover of each textbook. A clear visible technological shift is seen between the cover images, with the older covers being printed in monochrome and the newer covers being printed in full colour. This difference in technology used to produce the textbooks is likely to have an impact on the meaning, composition, and effects of images (Rose, 2016). Other technological aspects include fragile prints and use of highly acidic papers in the older textbooks (March,

2021). This latter technological choice is the result of economic, social, and political aspects of textbook production that comes under social modality of production (Rose, 2016), being a result of the greater responsibility of the Nepalese government to minimise the cost of textbook production while providing textbooks free of cost to students attending public-schools.

A brief overview of the cover images along with a short description of their content starting from the previous curriculum covers is presented below.



Figure 3. Cover of previous Nepali textbook

The Nepali language textbook image (Government of Nepal, 2008) in Figure 3 contains images of three girls and boys doing three various activities independently. The first girl is painting while standing, the second girl is reading a book lying on the floor, and the third girl is skipping. The painting consists of a Nepali hilly rural scene and an image of house. Two of the boys are reading books and the third seems to be going to school or coming from school as he is carrying a side bag that is generally carried to carry textbooks and notebooks. There is no specific setting except three dimensional Nepali third, twenty-fourth, twenty-fifth, and eighth letters 'ga', 'bha', 'ma', and 'ja' on the ground, suggesting the Nepali language textbook's content.

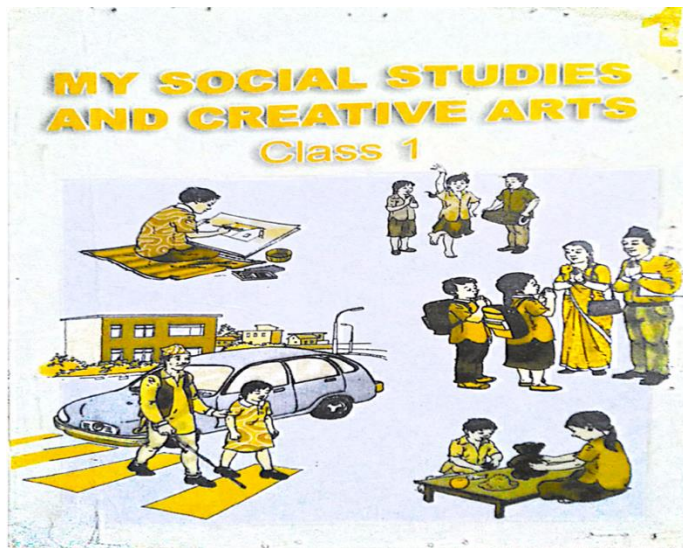


Figure 4. Cover of previous Social Studies textbook

The Social Studies textbook (Government of Nepal, 2007) cover, in Figure 4, like the Nepali textbook, contains five different images in one image area representing different contexts. The first image represents a boy painting an image of a traditional rural house. The second image depicts a girl dancing along with a girl clapping and a boy playing *madal* probably in school as they seem to be wearing uniform-like clothing. The third image shows a city setting from its background where a girl is helping an elderly blind man to cross the road. The fourth image portrays two children (a girl and a boy) and two adults (a man and a woman) greeting each other. It seems that they are students and teachers in or around the school setting suggested by their formal appearances. The last image shows a girl and a boy playing with clay and soft toys but together.

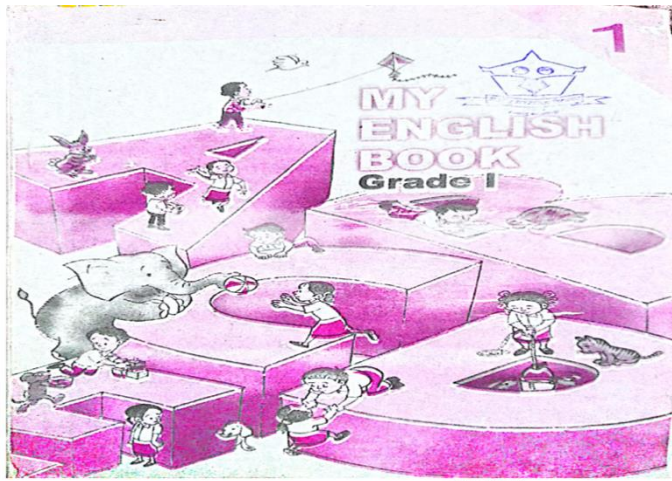


Figure 5. Cover of previous English textbook

The English language textbook cover (Government of Nepal, 2008) in Figure 5 contains a setting of three-dimensional English letter blocks where children are doing various activities. It is a long-distance view where boys are seen flying kites, playing *madal*, playing with some unidentifiable toy with a rat, pulling a girl, and reading. Girls on the other hand are seen dancing, playing ball with a baby elephant, playing hide and seek with some animal, and drawing water.

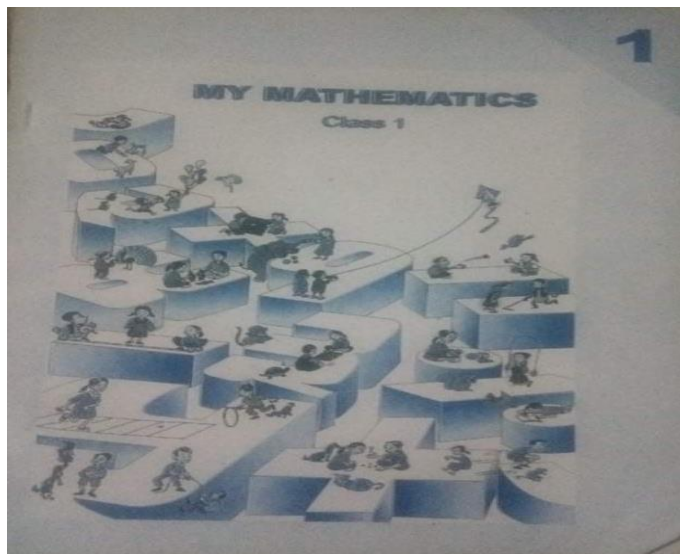


Figure 6. Cover of previous Mathematics textbook

The mathematics textbook cover (Government of Nepal, 2010) in Figure 6 gives a more long-distance top-down view making the characters tiny. The setting contains numbers and mathematical signs as blocks on which children are doing various activities. We can

see some individual activities and some group activities. Boys are seen individually flying kites, playing with a tyre, pulling others, running, and jumping whereas girls are seen playing skipping, *dhyakka* (hopscotch), dancing, and playing *gatta* (a game played by five pebbles). Some of the activities are unidentifiable and it is stressful to the eyes to discern their activities due to a very long-distance view.

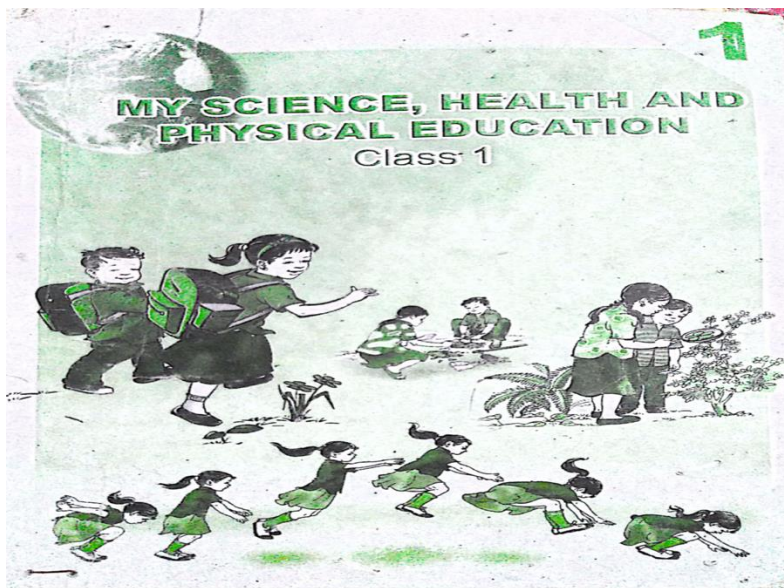


Figure 7. Cover of previous Science textbook

The Science textbook cover (Government of Nepal, 2007) in Figure 7 presents four different images in different contexts. The first image presents two children (a girl and a boy) going to or coming back from school. In the second image, a girl and boy are planting, the third image presents both a boy and a girl looking at the plant parts with a magnifying lens, and the fourth image contains a girl's jumping positions suggesting that physical education is also included in this textbook content.

In comparison to the previous textbooks covers, the new textbook covers are colourful and clearer in depiction of the characters, activities, and settings. The Nepali textbook (Government of Nepal, 2019), Figure 8 from the new curriculum contains a hilly village setting with green nature around. In the background, there are iconic thatched roofed rural houses, hills, and trees. In the middle ground, two children (a boy and a girl) are reading a book under a tree; and, in the foreground two children (a girl and a baby) are playing. We

can also see a puppy in the foreground along with two children. Children are bare foot which is a common sight in villages.



Figure 8. Cover of new Nepali textbook

The Social Studies textbook cover image (Government of Nepal, 2019) in Figure 9 presents a detailed rural hilly setting. The image has rural houses, Hindu temple, green hills, mountains, trees, and cattle in the background. In the middle ground, we can see men and women doing household chores like fetching water and washing activities in a community tap. In the foreground there are children (two boys and a girl) playing ball games.



Figure 9. Cover of new Social Studies textbook

The English language textbook cover (Government of Nepal, 2020) in Figure 10 presents a setting in nature although it looks unreal. It also presents a group of young animals along with two children (a boy and a girl) focusing on a textbook. One important aspect of this cover image is the inclusion of the children with disabilities by an image of a boy with crutches sitting with other characters. As in the Nepali language textbook, the children are barefoot.

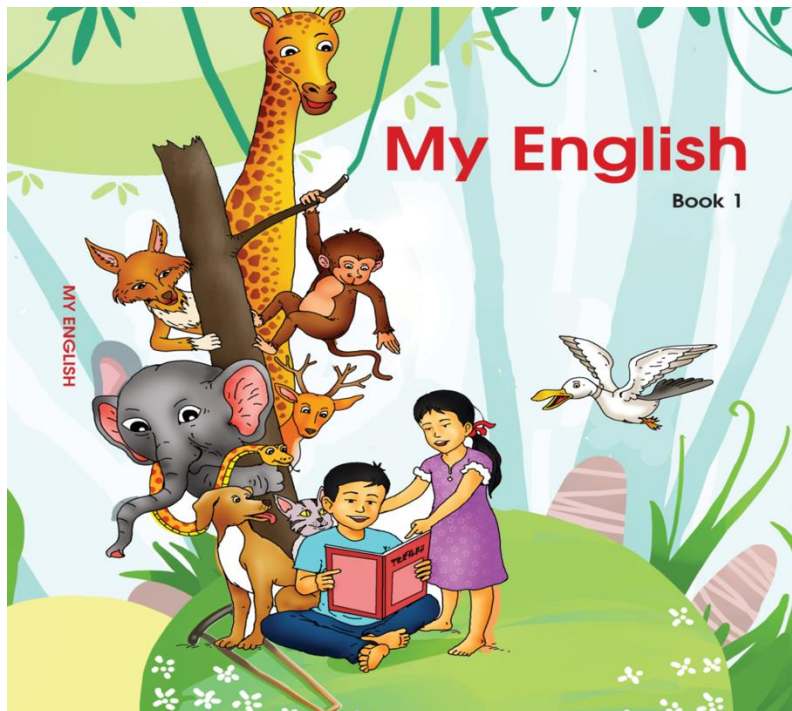


Figure 10. Cover of new English textbook

The mathematics cover image (Government of Nepal, 2019) in Figure 11 presents a setting with a fenced house at the background and an image of a girl and a boy holding balloons with mathematical signs on them. The house does not resemble the houses in Nepal as most of the Nepalese houses do not contain a chimney, and also the children are wearing shoes and socks, which is not common. These factors contribute to making this cover seem removed from the Nepalese context. We can also see cubes, triangle, and sphere on the ground suggesting the textbook's contents.



Figure 11. Cover of new Mathematics textbook

The brief overview presented above highlights the contents of the images across the curriculum. Now, based on the technical and compositional modality of the image production and on the site of image (Rose, 2016), the upcoming section presents the major shifts in the cover images under various topics.

4.3 Cover Images and their Audience Appeal

A clear shift can be noticed in the image contents across the curriculum, making the new cover images more appealing to the audience by adopting some changes in the image composition. Some of the significant shifts in compositional aspects are closer shot-distance and social distance, use of colour, and presentation of Nepalese contextual details in the images.

The use of closer shot-distance in the new textbook covers is a significant shift contributing to building audience-image connection (Rose, 2016; Kress & Van Leeuwen, 2006). This has an impact on the reduction of the activities in the cover images and an enhancement in clarity of the activities, characters, and setting details (see Figure , 3, 4, 5,

6, and 7 in contrast to Figure , 8, 9, 10 and 11). Additionally, the new textbook covers also reduces social distance emphasising closer connection between the characters (Kress & Van Leeuwen, 2006) bringing modification in individual activities in the previous textbook covers (see Figure, 3, 4, 5, 6 and 7) into co-activities enhancing character connection (see Figure 8, 9, 10 and 11). The close social distance promotes close relationship, teamwork, and mutual respect as they share the same space and are engaged in the same kind of activities. The co-presence of both males and females in the new textbook covers indicate close gender connections and gender equal relationships, potentially leading to a positive impact on the collaboration of the male and female children in the classroom activities.

Secondly, the presence of some iconic symbols of Nepalese culture and lifestyle on the covers brings contextual flavour to the audience and links the illustrations with the local context. The hills and mountains (see Figure 8 & 9), house types, temple architecture, dressing style, and natural resources (see Figure 8) bring Nepalese vibes to the images. Additionally, bare foot characters (see Figure 3, 4, 5, 6, 7, 10 and 11), a specific way of wearing a sari (see Figure 4 and 9), community tap, and inclusion of animals (see Figure , 8, 9 and 10) represents Nepalese lifestyle. These details connect the textbook contents with the everyday lives of the children and establish a connection between education and the context. Although Nepalese cultural and regional diversity is missing on the cover images, all the textbooks except the Mathematics textbook included some illustrations representing Nepalese ethnic, religious, and regional diversities through cultural and ethnic costumes, images of religious shrines, religious persons, and festivals.

Lastly, the use of colours is another important shift noticed in the new textbooks. Colour is one of the significant compositional elements impacting image interaction, representation, and composition (Kress & Van Leeuwen, 2006; Rose, 2016). The impact of colour in the new textbook covers has increased the modality of the images (Kress & Van Leeuwen, 2006) making them more realistic and familiar. Use of colour has also contributed to adding details of characters, setting, houses, and background. Although some studies found gender correlation with the use of colour (Maniam, 2011; Yang, 2016) no such strong suggestion was found in the cover images potentially due to the

influence of dominant Hinduism and Buddhism beliefs that avoids such masculine and feminine division of colours. Colours were one of the important factors of attraction for children while choosing books (Maniam, 2011), thus it is expected that the children would choose the new textbooks over the previous ones. However, this is left for the further exploration as this was not part of this research.

These details suggest that the new textbook cover images have acknowledged the features lacking in the previous curriculum textbooks and adopted more child-friendly, local, and attractive images by adopting an audience-centric compositional features.

4.4 Cover Images and Gender Depiction

In this section, the gender depiction of the new curriculum textbook covers is analysed in relation to the overall textbook illustrations to put the cover images and the children's visual interactions with the visual elements of the textbooks in the context of representation of gender. For this, the images with human characters in the textbooks were analysed based on overall gender roles that were depicted on activity types, occupations, gender relations, and appearances. The findings from the analysis are discussed under the various topics.

4.4.1 Gender and Activities

The new textbooks' cover images have tried to minimise the gender specific activities on their cover images and focused on counter-stereotypical activities by presenting both males and females in household activities (see figure 9). This section explores all images in the textbooks that depicts characters engaged in activities. The activity types presented in the textbook were of three types: everyday activities with relatively little gender implication, activities challenging gender stereotypes, and activities that sustained gender stereotypes. In the following table the activity types in all the textbooks are listed.

Activity types	Nepali language		Social Studies		English language		Mathematics	
	M	F	M	F	M	F	M	F
Child play activities								
Ball game	2	2	18	15	19	13	1	1
Toy cars	-		2	-	2	-	-	-
Playing cube	-	-	2	-	-	-	-	-
<i>Gatta</i>	-	-	-	4	-	-	-	-
Playing doll	-	-	-	6	-	2	-	-
Skipping	-	-	-	-	9	9	11	11
Carrom board	-	-	2	2	-	-	-	-
Child and Adults Mixed activities								
Household activities	8	17	39	47	-	-	2	3
Personal care	1	-	53	58	6	15	4	5
Horse riding	1	-	2	1	1	-	-	-
Being Sick or unwell	1	1	20	6	-	-	-	-
Caring	3	10	19	15	3	7	1	1
Cultural Activities								
Dancing	1	11	7	14	-	2	-	-
Kite flying	1	-	4	-	2	-	-	-
Praying	3	5	18	2	1	6	-	-
Playing musical instruments	21	1	8	1	4	-	-	-
Playing Swing	-	-	-	3	1	4	-	-
Mischievous actions	-	-	14	3	-	-	-	-
Activities at School	14	21	107	140	41	74	19	16
Others	83	74	-	-	81	71	89	80
Total	139	143	231	214	170	103	127	117

Table 1. Activity types as shown in textbook illustrations

The data indicates that the school activities were represented more by all the textbooks within which children were seen participating in various group activities at school,

studying in class, or playing in the school playground. In the social studies textbook, personal care activities such as brushing teeth, washing hands, combing, bathing, doing yoga, and exercise were dominant as a part of health and physical education content in this book. Even if one gender was represented more in some personal caring activities, it is understood that those activities are meant for everyone; thus, they did not imply gendered attitude. A positive aspect observed in these activities was that in most of these activities both males and females shared the same space, so no indoor and outdoor space division was found. The activities categorised as others include simple activities relating to everyday life such as eating, sleeping, walking, sitting, looking at something and so on. These activities only contribute to gender implication through the representation of male and female characters.

Each textbook also included activities that challenged traditional gender notions such as gender inclusion in household activities. As gender norms are different in different societies (Connell, 2002); in Nepal, some traditionally gendered children's play activities are skipping and ball games - the textbooks were progressive in the sense that both genders were included in them. Contrary to this, the activities that sustained gender stereotypes presented only one gender in some child plays such as girls in *gatta* and playing with dolls. Likewise, boys were projected playing with toy cars and cubes against girls playing doll that gives a false message that even toys are gendered. Similarly, activities like horse riding and cycling also only featured boys.

Some of the adult and children's activities featured in the textbooks were also part of Nepalese culture. For example, only boys were featured flying kites against girls playing swing as a part of a Dashain festival. Likewise, in cultural performances and an iconic image of Tihar festival, males were dominant in playing musical instruments and girls were dominant in dancing. Even though females from the Newari community are traditionally active in playing musical instruments, not acknowledging this has given false information about male domination in musical instruments. Likewise, females' dominant presence in praying activity also suggests Nepalese cultural side in which females more than males are perceived to be inclined toward religious activities although males also take part in them.

The gender stereotypes were noticed particularly within the category of household activities. Females were presented more in cooking, serving, winnowing, and washing clothes. Within caring activities, females were dominant in looking after the young children and the males were projected helping the adults and carrying the sick on a stretcher.

Males dominated the sick characters and also the mischievous ones. Although, there have been gender inclusion in disability, accidents, and mischievous actions in contrast to the previous textbooks (Paneru, 2019), males still dominate these categories especially in social studies textbook. Out of 26 sick characters, 20 are males. Similarly, 14 boys are portrayed doing mischiefs against 3 girls. This type of representation normalises the idea that boys are mischievous than the girls and they are more likely to get into trouble.

The data shows that social studies textbook presents the widest range of activities, followed by the English language, Nepali language, and Mathematics textbooks. This may be because unlike the mathematics textbook, the Nepali and Social Studies textbooks require presenting social cultural context as a part of the content. Moreover, the English language textbook has utilised animal characters resulting in fewer activities. Similarly, the Mathematics textbook used both animals and things along with human characters. The findings from all the mandatory new textbook images suggests that the new textbooks have tried to be inclusive and minimised stereotypes. However, most of the activities still reinforced gender stereotypes by aligning them with the traditional gender beliefs.

4.4.2 Gender and Occupations

All the textbooks maintained male domination in a variety of occupations except mathematics although females were presented as professionals. It was also noticed that the occupation types of males required physical strength and some of them were guided by traditional gender attitudes. The gender depiction of occupations in each textbook are presented below.

Occupation types	Nepali language		Social Studies		English language		Mathematics	
	M	F	M	F	M	F	M	F
Professional Occupations								
Teacher	4	4	8	8	4	9	-	1
Doctor	1	2	1	1	-	2	-	-
Writer	1	-	-	-	-	-	-	-
Nurse	-	-	-	2	-	4	-	-
Lawyer	1	1	-	-	-	-	-	-
Chef	-	1	-	-	-	-	-	-
Traffic Police	-	-	-	1	-	-	-	-
Police officer	1	-	-	-	-	-	-	-
Photographer	2	1	-	-	-	-	-	-
Fire fighters	-	-	2	-	-	-	-	-
Practical Occupations								
Seller	6	3	7	10	-	-	1	-
Tea picker	-	1	-	-	-	-	-	-
Construction workers	1	-	4	2	-	-	-	-
Carpenter	2	-	1	-	-	-	-	-
Tailor	-	-	-	1	-	-	-	-
Farmer	-	-	9	6	3	-	1	1
Cobbler	-	-	1	-	-	-	-	-
Plumber	-	-	1	-	-	-	-	-
School caretaker	-	-	2	-	-	-	-	-
Monarch	-	-	-	-	1	5	-	-
Porter	-	-	-	-	3	-	-	-
Driver	1	-	-	-	6	-	-	-
Clowns	-	-	-	-	4	-	-	-
total	22	13	36	31	21	20	2	2

Table 2. Gender representation in occupations

It is noticed that, except in the Mathematics textbook, males dominate the occupational positions. Males are projected in more occupation types than the females aligning with the findings of other textbook studies around the world (Ariyanto, 2018; Arslan Ozer et al., 2019; Lee, 2018). Some occupations, such as carpenter, cobbler, plumber, school caretaker, driver, clowns, and porter are male dominated occupations in Nepal and are not challenged in the images. Among them, being a porter requires strength, so this also suggests males are best suited for physically demanding jobs. Similarly, some occupations are also presented exclusively as female occupations such as nurse and tea leaves pickers aligning them with the Nepalese social reality where that type of work is mostly done by females.

4.4.3 Gender and Social Relations

Gender relations are observed in terms of familial relations presented in textbooks and also in term of in what activities were they doing and how they shared spaced when they were together. Familial relations were considered to be depicted in images that portrayed characters specified in familial relation and where more than one family members were together in the same space. Social relations were determined to exist in any other relations where both males and females who were not specified as family had their co-presence, shared activities, and shared spaces. Gender-based familial relations can be summarised in the table below.

Relation	Nepali language	Social studies	English language	Mathematics	total
Mother/wife	17	18	13	7	55
Father/husband	9	14	13	5	41
Brother/son	19	16	11	3	49
Sister/daughter	19	18	15	3	55
Grandfather	1	5	1	-	7
Grandmother	2	4	1	-	7
Uncle	2	-	2	-	4
Aunt	1	-	1	-	2

Table 3. Gender representation in various family relations in textbooks

It was found that in three out of four textbooks mothers were the most represented relation along with daughters/sisters. Mothers are highly valued in every community and Nepal also values mothers as the pivotal member of family, something reflected by the dominant presence of mothers in the textbooks. However, in these textbooks, fathers are seen beside the mother character doing something or helping the mother in her work implying the father's familial responsibility as important as mothers'; this inclusion is seen as a positive change in the textbooks. The key reason for the dominance of mother's illustrations is because the icon of mother image was used multiple times to suggest a word starting from 'Aa' as in Nepali language mother is called '*aama*'. The number of daughter/sisters indicates that the textbooks seem to have valued daughters over sons/brothers. One of the possible reasons for doing so might be to challenge the tendency to a preference for male children in Nepalese society (Lamichhane et al., 2011; Khanal, 2018). It might also be indicative of supporting girls in education materials which is a positive point. Other family members represented are fathers, brothers/sons, grandparents, uncle, and aunt. The smaller number of extended family members might indicate the growing number of nuclear families in Nepal.

4.4.4 Gender and Appearances

Gender and social norm of specific hair length and drees code was maintained in all textbooks except in a few cases. The following table presents a summary of the images with gender neutral dress in each textbook as hair norm was maintained in all the textbooks.

Textbooks	Nepali		Social studies		English		Maths	
	M	F	M	F	M	F	M	F
Gendered clothes	182	157	396	379	203	216	101	92
Non-Gendered clothes	1	3	-	33	-	2	-	7

Table 4. The number of gendered and non-gendered clothes appearances

The data shows that in all textbooks non-gender or counter-gender clothes were worn by only females except in the Nepali language textbook. In this textbook a male child was shown wearing *kurta suruwal* (Figure 12) which is a female dress. This is a very rebellious illustration included in the Nepali textbook as no male would wear female specific dresses unless they belong to a non-binary community, or they are too young to understand gender norms. Or, boys might wear female specific clothes inside the family; however, males are not encouraged to do this and would be mocked when they wear female clothes.

 सुन्नुहोस् र उत्तर भन्नुहोस् :



राम्रो विनय

गाउँमा मेला लागेको थियो । सबैले आफूलाई मन पर्ने लुगा लगाए । आमाले साडी र चोलो लगाउनुभयो । दाजुले कमिज र पाइन्ट लगाउनुभयो । बुबाले दौरा र सुरुवाल लगाउनुभयो । भाउजूले कुर्ता र सुरुवाल लगाउनुभयो । विनयले पनि राम्रा लुगा लगाएर आयो । विनयले हाँस्दै सोध्यो, “मैले लगाएको लुगा कस्तो छ ?” आहा ! विनय त कस्तो राम्रो देखियो । सबै खुसी भए ।

Figure 12. A boy wearing Kurta Suruwal, a female specific dress

One of the special features regarding female clothing suggested different norms for young females and adult females. This was reflected by the images of all adult females who wore traditional gendered dresses like sari, and *kurta suruwal*, as depicted on the cover images. Only in a few cases, where both males and females were depicted in cultural costumes, boys were also wearing traditional gendered dresses. It implies that grown up females are more likely to wear local gendered outfits than males in Nepal. Also, it appears that young females are flexible in wearing traditionally male-specific clothing like pants, shorts, and t-shirts in comparison to males. This also resembles a global tendency of men and women's attire.

4.5 Conclusion

The findings indicated major changes in technological modality impacting image compositions and their meanings. The modifications in the images have made them audience friendly by incorporating closer distances, use of colours and inclusion of some iconic details reflecting Nepalese context.

The representation of gender in the images had changed with the female inclusion in some traditionally male-dominant activities and males in the traditionally female-dominant activities. The inclusion of more females in professional occupations indicates that textbooks have adopted the gender inclusion policies from new constitutional changes (Secretariat, Constitutional Assembly, 2015) and educational documents (Government of Nepal, 2019) where gender equality have been prioritised. However, there are still implied gender stereotypes in some activity types because they continued to represent the dominance of certain genders in these activities. The gender stereotypes are also sustained by males' involvement in some occupations demanding physical strength. Regarding relations, focus on mothers and daughters/sisters has resulted in the representation of more females and heightened their importance. Equal participations of all the family members in various activities and equal participation of both males and females in group activities indicated equal gender status. However, regarding appearances, still traditional gendered hair and clothes are dominant and are reinforcing and normalising these gender looks.

Lastly, a positive representation of cultural and religious diversity was included in the textbook illustrations in the cultural outfits, religious celebrations, religious personalities, religious shrines, and musical instruments, indicating gender intersection in contrast to the representation of monoculture in the cover images. Therefore, in answering the research questions regarding the gender representations in terms of roles, relations, and activities in the new textbooks, this chapter unearths important findings from the textbook images that resemble the changed social political context of present Nepal. It can be said that the textbooks have presented gender equality in occupations, activities, and relations.

5. The Children and the Images

5.1 Introduction

This chapter presents the findings on the images chosen by Grade 1 students as their favourite illustrations from their textbooks and on the pictures that they drew in response to the request to design a cover for a given text, and their descriptions of the drawings in a short interview. It begins with an introduction to the children. This is followed by the analysis of the covers of the books from which children choose their image. The findings show that children from different ethnic backgrounds did not choose different types of images, but that girls and boys did seem to choose illustrations with different content. The textbook covers drawn by the children did show some differences by gender, but limitations in the data collection techniques mean that what the children actually drew may have been an artefact of their interaction with the researcher.

Before going to the images here is a brief summary of the participants' name and backgrounds in the following table.

Names	Gender	Ethnicities	Ethnic language	Locations
Urmila	Female	Dalit	Doteli	Kailali
Sita	Female	Tharu	Tharu	Kailali
Deepa	Female	Chhetri	Nepali	Kathmandu
Prema	Female	Brahmin	Nepali	Kathmandu
Sabya	Female	Tamang	Tamang	Kathmandu
Ramesh	Male	Dalit	Doteli	Kailali
Saroj	Male	Tharu	Tharu	Kailali
Om	Male	Brahmin	Doteli	Kailali
Chandra	Male	Kirant	Rai	Kathmandu
Sanjog	Male	Brahmin	Nepali	Kathmandu

Table 5. Names of Students and their ethnic backgrounds

5.2 The Covers Used by the Children

As mentioned in the methodology and limitation section, the data collection was carried out in the private schools that also used the textbooks endorsed by governments as well as the government published textbooks analysed in the previous chapter. As a result, all the participants except Urmila chose their favourite images from the textbooks endorsed by the government. The following section introduces the cover images of those textbooks, to provide a context for images selected by the children.

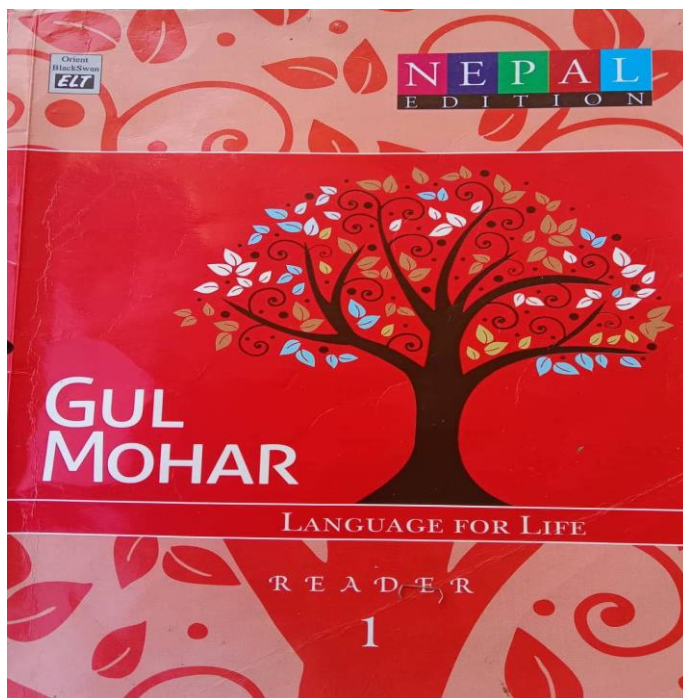


Figure 13. Cover of Gulmohar's English textbook

Gulmohar Language for Life: Reader 1 (Bhaskaran, 2014) seen in Figure 13 is an additional English language book used in some private schools as an English language textbook. This book contains advance English language content that is more advanced than the English language textbook published by the government of Nepal. Though published in India, this is the Nepali edition made to be used in Nepalese schools complying with the requirement of national curriculum and educational policies in Nepal. As seen in the above image, the cover of this English language textbook does not represent any human characters. Instead, it presents an image of a colourful tree as an iconic but not realistic representation of a gulmohar (Royal Poinciana) tree.

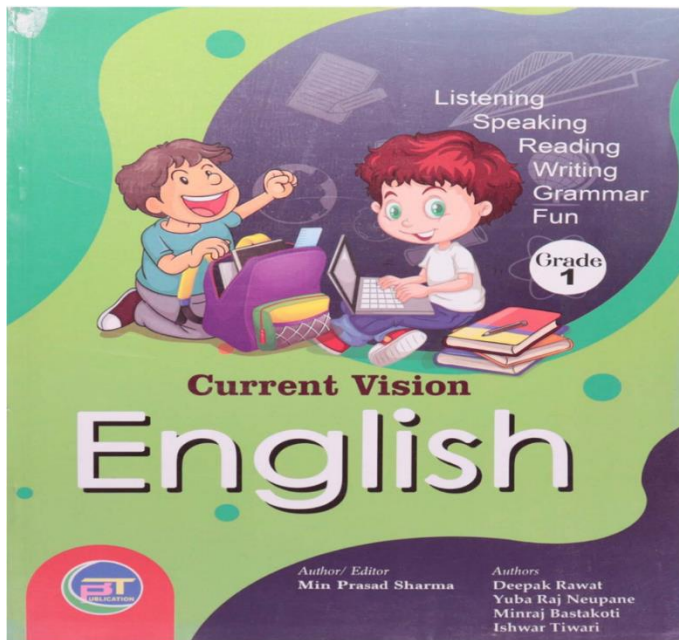


Figure 14. Cover of Current Vision's English textbook

Current Vision English: Grade 1 (Rawat et al, 2022) shown in Figure 14 is another English language textbook used by various private schools in Nepal. Unlike the previous book, this book is published in Nepal. The cover image presents two happy boys with their school bag, textbooks, and laptop. Their appearance indicates that they are city boys in modern western dress. Moreover, the eyes and hair colour of the characters are also unusual for Nepalese characters. Additionally, there is not any setting detail suggesting a Nepalese context. It seems that the cover is indicating that the textbook has foreign content.

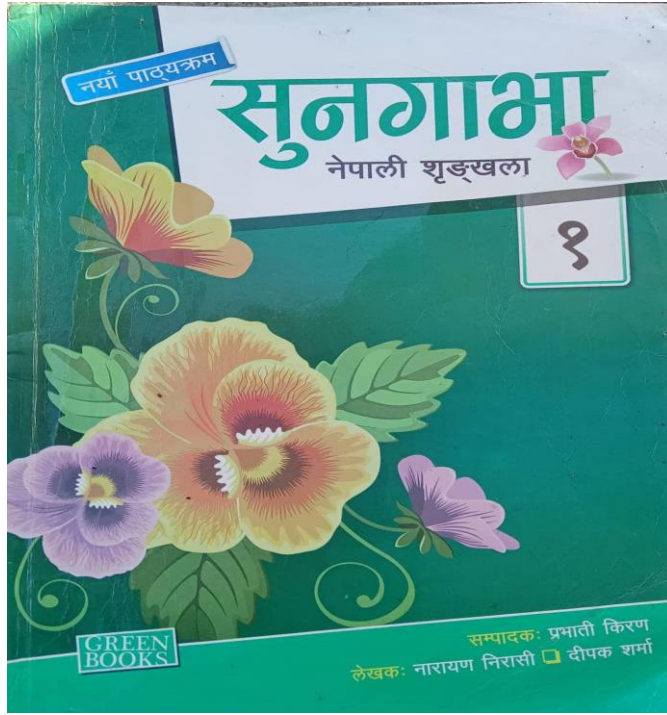


Figure 15. Cover of Sungava's Nepali textbook

Sungava Nepali Shrinkhala 1 (Nirashi & Sharma, 2022) pictured in Figure 15 is a Nepali language textbook used in some Nepalese private schools. The textbook name means an orchid flower in Nepali language and there are images of pink, yellow, and purple flowers on the cover image. Other than the script and the name *Sungava* nothing Nepalese is reflected on the cover image of textbook. Moreover, there are no human characters.

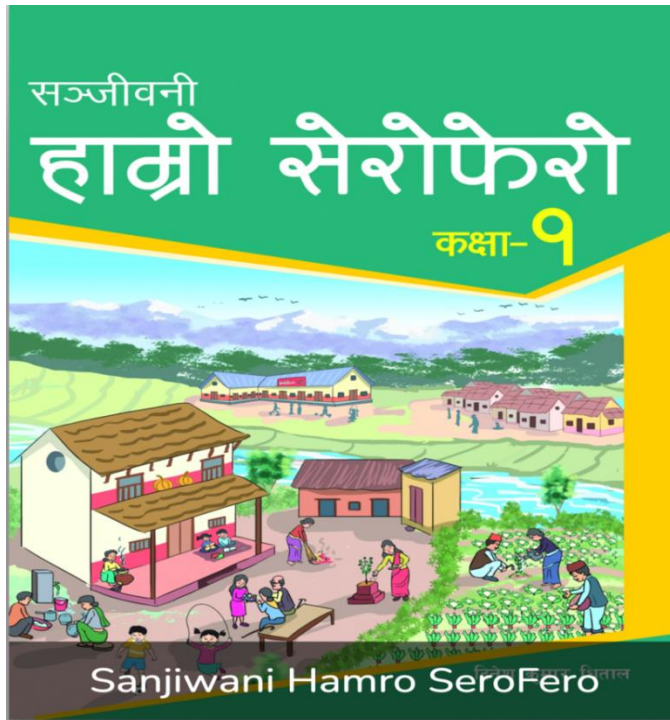


Figure 16. Cover of Sanjiwani's Social Studies textbook

Sanjeevani Hamro Serofero: Kakshya 1 (Dhital, 2020) in Figure 16 is a social study textbook used in various private schools of Nepal. The cover of this book is different from the other covers discussed in this chapter as there is a detailed setting and a total of 15 human characters doing various activities. Among them there are both adults and children. We can see a tap where a male and a female are doing household chores. A girl is playing skipping and a boy beside her is playing football. Two elderly characters probably the grandparents are sitting on an outside bed and a girl is serving them some snacks. A woman can be seen baking popcorn in a traditional oven and pot. Two other children are studying in the veranda. Two males and a female are working in the field nearby home. A woman is doing *puja* (offering prayer) to *Tulshi math* (a place where the Holy Basil plant is housed) a Hindu ritual. One of the female characters is sweeping. This book very beautifully and realistically presents village life. The houses, mountains, forest, school (the long building in the background) and so on give a detailed view of a Nepalese village. We can see two pumpkins on the roof and a small toilet (yellow coloured tin roofed structure) outside the home. All these all details give a Nepalese flavour to the cover. The image is important from the gender perspective as we can see progressive as well as some cultural division of work among males and females. The women are seen cooking, cleaning, and serving.

Additionally, a gendered division of play activity (boy playing football and girl skipping), and progressive gender contents such as a male doing chores with a woman in the tap, and males and females working together in the field is found.

This cover image is important as two of the participants' cover design presents contents similar to that found in this image. For example, the pumpkins on the rooftop, two young children reading in the veranda, the house, a female cooking something, and so on. This part will be discussed along with the discussions of the children's images in a section below.

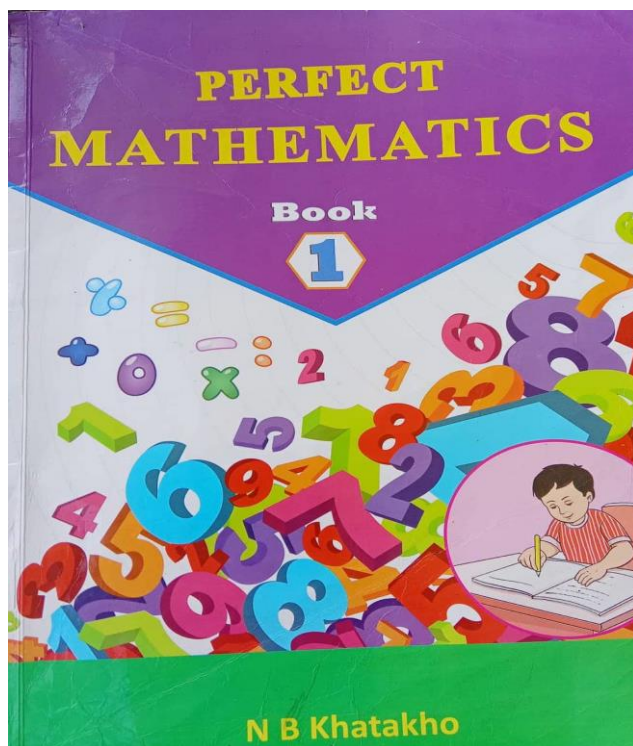


Figure 17. Cover of Perfect's Mathematics textbook

Though the participants did not choose any images from the mathematics textbook in Figure 17 as their favourite image, two were asked to draw mathematics cover images. In the schools included in the case studies, the given mathematics textbook was used. For the sake of completeness, an analysis of the mathematics textbook is provided. The mathematics textbook cover image has a male character writing along with numbers and

signs. From the gender aspect, it avoids female characters. No Nepalese context is reflected in the textbook cover image.

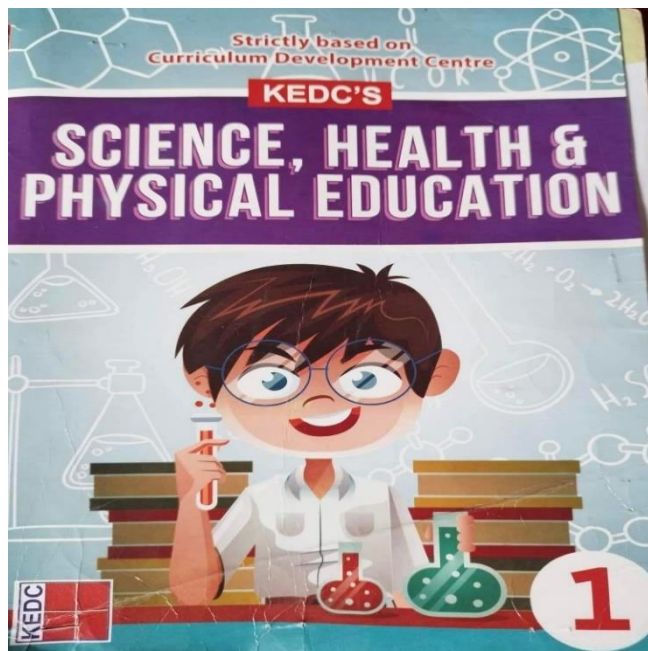


Figure 18. Cover of KEDC's Science textbook

The final textbook used in the case study schools and from which a Grade 1 student selected a favourite image is *KEDC Science, Health, and Physical Education* (2019) presented in Figure 18. It is a science textbook used in some private schools. This textbook cover contains an image of a male in a lab as with some lab tools.

These descriptions of the textbook covers used in the participants' schools and from which the participants chose their favourite activity images indicate that two of those textbooks have avoided human characters in their textbook covers, while two others have only presented males. Sanjeevani's Social studies textbook differs from other textbooks, which have avoided any setting details that resemble Nepal. Moreover, two textbooks present human characters who do not resemble Nepalese people on the cover. It makes the cover images more disconnected from the Nepalese context and insensitive toward gender parity.

5.2. Findings from the Participants' Selected Images

The ten participants were asked to choose one of their favourite activity images from any of their textbooks and to answer some questions regarding that image. The findings presented below draw on the content analysis of the images and the interviews and the compositional analysis of the images. Two themes emerged from the content analysis of the selected images: an emphasis on Nepalese culture and traditions and a focus on social relationships including gender.

5.2.1 Reflection of Nepalese Social Cultural Context

Images are situated in a specific socio-cultural context (Kress & Van Leeuwen, 2006; Rose, 2016). Thus, most of the images selected by the participants suggest some of the social-cultural aspects of Nepal through various cultural symbols. In order to find out to what extent religious and cultural diversity were reflected in the textbook, and to provide a context for the images selected by the children as their favourite, the images in textbooks used by participants and the ones published by the government were analysed using content analysis. The findings are presented in the table below.

Name of textbooks	Publications	Images reflecting culture	Total images
Other publications			
Sungava Nepali	Green House	119	671
Gulmohar English	Orient Black Swan	0	203
Current Vision English	Brain Train	53	999
Sanjiwani Social Studies	Sanjiwani	133	886
KEDC Science	KEDC	29	853
Government Publication			
Social Studies	government	78	905
Mathematics	government	13	745
English	government	65	1286
Nepali	government	58	500

Table 6. Cultural images in endorsed and government publications

Following the national curriculum policy, all the textbooks projected general and some specific cultural details. However, it can be seen in the table that illustrations that depict culture are relatively fewer than the total images. The cultures in these textbooks reflected multiple major religions and ethnicity. The multi religious nature of Nepal was represented by the images of various religious shrines (mosque, church, temple, and monasteries), festivals (Id, Dashain (three times), Tihar, Christmas, *Chhath*, and Holi), religious figures (priest, pundits, monk, and Mullah). Similarly, illustrations reflecting Nepalese marriage, various cultural costumes, traditional musical instruments (*Panche baja*, *madal*, *Dholak* etc.), traditional household equipment (*halo*, *kucho*, *dhiki*, *okhal*, *kodalo*), images showing greeting styles and so on, also mirrored the local cultural aspects.

Nepali, and social studies textbooks present more cultural images than other textbooks probably because their content requires them to present the Nepalese context more than

other books. Among all textbooks listed above, *Gulmohar: Language for Life reader 1* had the least images reflecting the religious and cultural diversity of Nepal. One of the possible reasons could be because this book was published outside Nepal. This superficial comparison showed that the government textbooks have fewer cultural images than the textbooks used in the case study schools, which are endorsed by the government.

Nepalese culture has a strong focus on social relationships, and this is also reflected in the spatial organisation within the images. A compositional analysis of the images was carried out, to identify features of Nepalese culture that may have affected the children's understanding. Each of the selected images presented a long shot, which allowed for the image to be set within its context and for a level of detail to be included.

The social distance is suggested by the nearness between the characters and other objects. There are various social relationships suggested by the distance like close personal distance, far personal distance, close social distance, and far social distance (Kress and Van Leeuwen, 2006). The close personal distance suggests intimate relationships indicated by touch, far personal distance is a one-hand distance between the characters, and far social distance suggests no touch is possible but a distance where one can see and hear each other, longer distances than that suggest disconnection. Based on this view we can see that most of the characters in the images are at a far personal distance as most of them are not touching each other. Chandra's image (Figure 8) is different as it shows all four social distances. We can see a far personal distance between the customers and the shopkeepers, a close personal distance is seen between a mother and child, a close social distance can be noticed between the mother and the shopkeepers, and a far social distance is suggested by the characters in the background whose silhouettes are only visible.

It can be concluded that the images selected by the participants present a full view of the characters (long shot images) based on the activity presented in the images, and character connection avoids close personal distance, suggesting intimacy only between mother and child in the image Chandra selected.

This analysis shows that the latest textbooks in their contents have included cultural aspects and religious diversity in their contents. This is the context from which the images selected by the participants have been drawn, thus it is not surprising that these images reflect cultural aspects, even though the children were not aware of these factors and did not talk about them. The section below sets out the images chosen by the children and links them to Nepalese culture.



Figure 19. Sita's favourite activity image



Figure 20. Urmila's favourite activity image

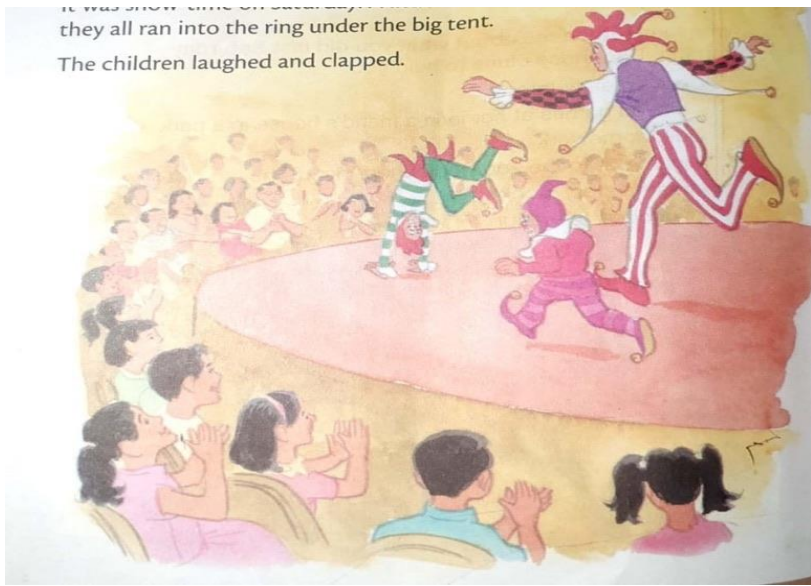
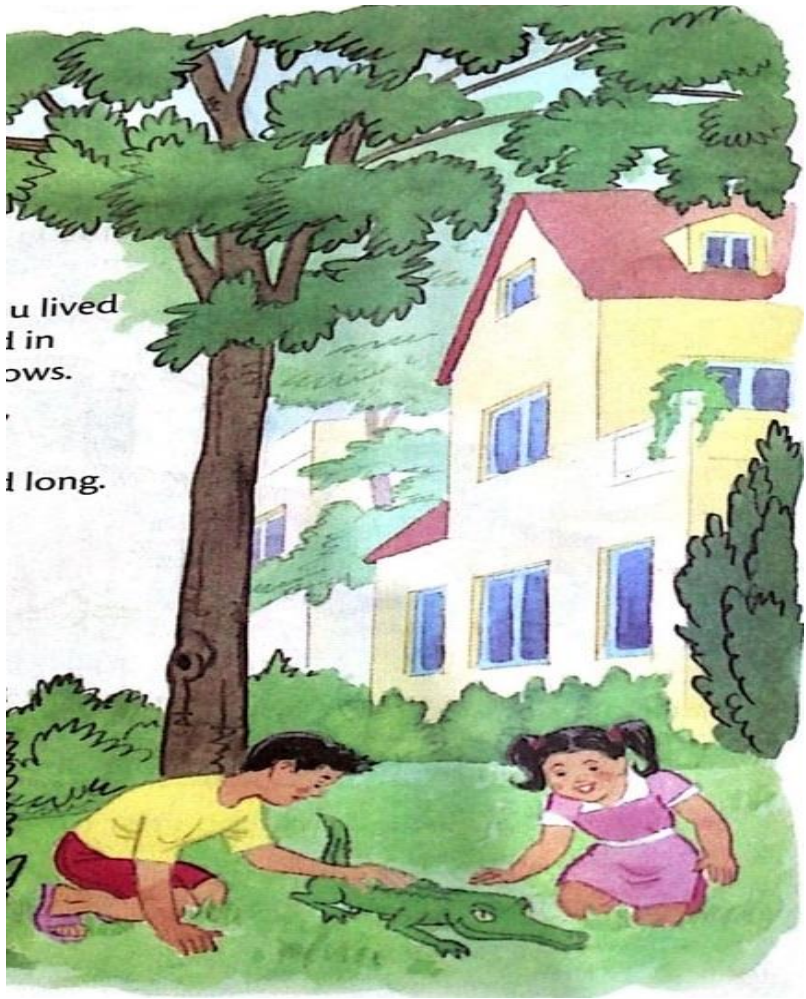


Figure 21. Om's favourite activity image



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l long.

Figure 22. Ramesh's favourite activity image

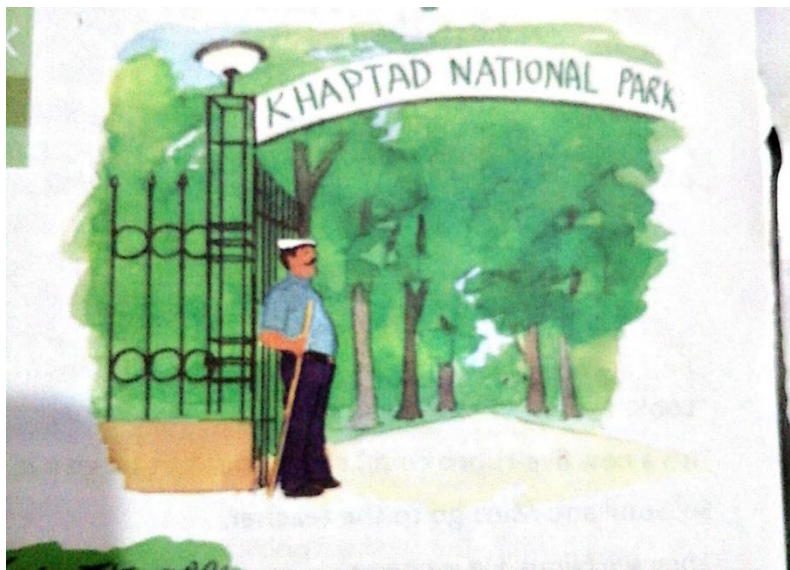


Figure 23. Saroj's favourite activity image



Figure 24. Deepa's favourite activity image

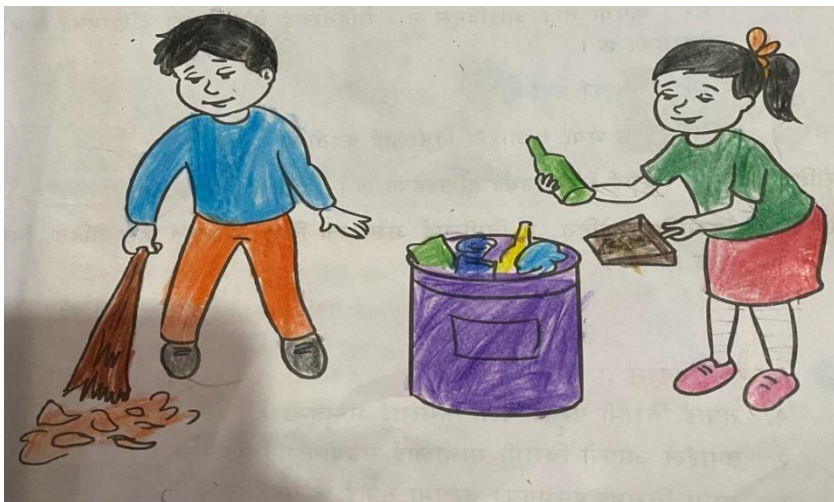


Figure 25. Prema's favourite activity image



Figure 26. Chandra's favourite activity image



Figure 27. Sanjog's favourite activity image

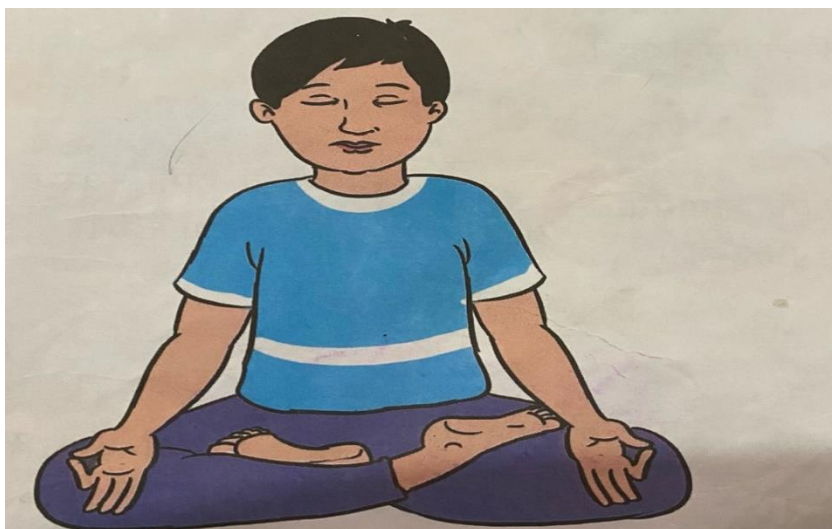


Figure 28. Sabya's favourite activity image

Urmila chose as her favourite image an illustration showing a Nepalese regional dress worn in the mountain region called *bakhu* (Figure 20). The thick woollen cloth, shoes, and cap on her head also indicates the climatic condition of that area. Similarly, Figure 26 selected by Chandra shows a Nepalese traditional market called *hat bazar* where farmers bring their products directly to sell to the customers on specific days of the week. This image also gives details about the Nepalese casual costumes for the men and women. The special cap worn by the man is called *dhaka topi* which is an official national cap of Nepal. Also, the dress worn by women *sari and blouse* are the clothes usually worn by adult and married women in Nepal. The difference between the dress of young females and adult females says that Nepal has different dress norms for young, adult, and married women.

The image selected by Sabya (Figure 28) illustrates a boy meditating which is again an Eastern daily activity especially popular in Hindu and Buddhist lifestyles. When Sabya was asked what the person was doing in the image she said “*Om gardaichha*” translated “doing Om”. This Om is a Hindu and Buddhist sacred chanting word that is often used in meditation. As she did not know the word ‘meditation’ she said this.

Other images contained elements of Nepalese culture, familiar to children in the home and outside. Figure chosen by Sita (Figure 19) and Prema (Figure 25), represents cleaning activities. The cleaning equipment ‘broom’ in the lady’s and the boy’s hand in both images is one of the popular everyday tools for Nepalese households. The image selected by Deepa (Figure 24) shows a *dhaka topi* worn by an adult male and a *sari and blouse* by a female (though the sari is not visible). Though not exactly, the image selected by Saroj (Figure 23) has also details that resemble the dress code of Nepal Police, that is the sky-blue shirt and dark blue pants with a white police cap. Also, the board behind the police suggests one of the national parks of Nepal. Although, the image selected by Ramesh (Figure 22) does not have any cultural details; however, it shows a crocodile which is one of the popular and protected wild animals in Nepal.

Only the images selected by Sanjog (Figure 27) and Om (Figure 21) had no cultural details within it as the characters in this image are in casual modern clothes and the image has a minimal setting.

5.2.2 Gender and Household Responsibilities

The participants were asked probing questions regarding the possible activities of characters in the selected images, including how they identified the gender of these characters. A significant finding was the internalisation of the dominant appearances of males and females mostly from their gendered clothes and hair length. Secondly, it emerged that the children had internalised some of the tasks depicted as gender-specific tasks.

Participants were asked how they differentiated male from female. It seemed that they had some difficulty in articulating the difference, as Sita's response shows:

R: Who is this?

Sita: Human

R: Is this a boy or a girl?

Sita: Girl

R: How did you know?

Sita: By seeing.

When questioned further, most of them said that they could whether it was a boy or a girl because of the hair length and clothes the characters were wearing, as the interview with Ramesh showed. When he was asked to differentiate the girl from the boy in his selected image, he did not say anything. Seeing his confusion, the researcher further asked whether he could differentiate them from their dress colour; after that, he responded. Here is the part of that conversation:

R: Can you tell them from their dress colour?

Ramesh: One who is wearing yellow dress is a boy and the one wearing pink dress is a girl.

R: How did you know that yellow dress is the boy and pink is the girl?

Ramesh: Hair.

Similarly, Urmila said that she knew the characters in her chosen image were girls “By hair and frock”. Prema said, “Girl has long hair. Boy has short hair.” Sanjog responded, “She has long hair.” The researcher teased him by saying, “This must be a boy with long hair.” He replied, “No, girl.”

Participants were also asked questions to elicit their understanding of gender roles. It seemed evident, in the questioning about who carries out tasks in the home, that some children first gave an instinctive response showing the mother and daughters having different roles and responsibilities from the father and brothers, which they altered when prompted. When Saroj was asked about the characters his response was following:

R: Who is the person in the image?

Saroj: Policeman

R: Is he a man or woman?

Saroj: Policeman

R: Are police only boys or girls?

Saroj: Boys and girls

R: What will a girl police do at home?

Saroj: Clean, eat food, make food, wash utensils, bath, etc. works

R: What about a boy police?

Saroj: At home, eat food, clean home, bath, make food, etc

R: Who cooks at home?

Saroj: Mom

R: What about father?

Saroj: Father also cooks.

Saroj's answer is ambiguous as when he was asked about the activities at home regarding police, he did not make any distinction as both male and female police cook, clean, and wash. However, when asked who cooks food at home, he said 'mom'. Again, when prompted, he said, "father also cooks". It seems that rather than giving his own answer, he wanted to give a correct answer for each question.

Ramesh provided a similar response, adding the father's contribution to domestic work after being prompted.

R: Didn't you like people?

Ramesh: Yes, boy.

R: Didn't you like the girl?

Ramesh: Yes (He meant he also liked the girl)

R: What will the girl and the boy do after playing with the crocodile?

(The participant did not answer and seem confused, so I explained)

R: You can tell any activities that you think they will do when they go home? All answer is the right answer. No need to worry. What will they do?

Ramesh: They eat

R: Will they work?

Ramesh: Yes

R: What work will a boy do?

Ramesh: Work that father and mother tell them to do.

R: Who will clean the house?

Ramesh: Mom

R: Mom will only clean?

Ramesh: Mom and dad

Ramesh's answer also suggests younger children are spared of the household chores and only adults are involved in them.

Urmila was vocal about the things she was sure of but when she was confused, she remained silent. Her responses reflected her internalisation of gender norms.

R: What will they [the girls] do after playing?

Urmila: They will go home and cook food and wash utensils.

Urmila was able to make distinctions based on age, although represented here by size, a reflection of her capacity to express herself in Nepali.

R: Are they small girls or big girls?

Urmila: Small girls

R: And can small girls cook and wash?

Urmila: No, big girls.

R: Can big boys do that work?

Urmila: No

R: What will a big boy do?

Urmila: They study

R: And?

Urmila: Eat

R: And?

Urmila: Study

Sabya's response may also have reflected a problem in expressing herself in Nepali, although it may also reflect gender identity:

R: What the boy in the image will do after meditation?

Sabya: "Cook food, play, dance, sing, eat".

R: What the boy will not do?

Sabya: "Boy will not wear frock."

Chandra and Deepa's responses regarding their selected images did not record any gendered opinion. But Om's drawing was that of clowns performing in front of the audience. His attitude toward the occupation of clowns was that only grown-up boys can be clowns.

These answers from the participants demonstrate that they have internalised that some clothing is only for the girls and some only for the boys. Similarly, they pointed to long hair as a characteristic of a girl and short hair that of a boy. Participants denied that the dress of boys and girls can be interchangeable. These responses suggested that Nepalese social life has hair and clothing rules for the males and females and normally males and females wear gender specific clothes and wear their hair according to the social expectation. On the question of gendered household tasks, they regarded cooking and cleaning activities as women's work, although when prompted about a father's involvement, some children seemed aware that the acceptable answer was that father also engaged in domestic tasks.

5.2.3 Gender and Occupations

When the activities in the participants' selected images were observed, it was found that only images selected by males contained occupational activities. Here, the activities that generate income are regarded as occupations. It was seen that images selected by Om (Figure 20), Saroj (Figure 21), and Chandra (Figure 26) had economic activities. These images show characters performing in front of audiences, a gatekeeper doing duty, and selling things in the market. In contrast to these images, none of the other images show income generating activities. The first two images with occupations were selected from *Gulmohar: Language for Life, Reader 1* (Bhaskaran, 2014), and the image of market was chosen from *Sanjeevani Hamro Serofero: Kakshya 1* (Dhital, 2020).

To put these choices in context, it was important to know what number of images in the textbooks depicted occupations. There was a difference between the representation of occupations in the government published textbooks and the externally published textbooks. The analysis of the externally published textbooks is presented first. There are two tables for the occupations in externally published textbooks: Table 7 and Table 8. Since the table incorporating overall occupation in the selected externally published textbooks was larger than a page, for the clear visibility professional and practical occupations are presented in two separate tables as shown below.

Professional Occupations	Gulmohar English		Sanjiwani Social Studies		Current Vision English		Sungava Nepali		KEDC Science	
	M	F	M	F	M	F	M	F	M	F
Police	3	-	-	-	1	-	1	-	-	-
Doctors	2		3	1		4	1	-	3	-
Nurses	-	-	-	-	-	7	-	1	-	1
Teachers	-	2	2	3	8	16	-	8	-	-
Guitarists	-	1	-	-	-	-	-	-	-	-
Soldiers	-	-	1	-	-	-	9	-	-	-
Fire Fighters	-	-	3	-	-	-	-	-	4	-
Chefs	-	-	1	-	3	-	1	1	-	-
Traffic Police	-	-	1	-	-	-	-	-	-	-
Bank Tailors	-	-	-	-	2	-	-	-	-	-
Post-persons	2	-	-	-	-	-	-	-	-	-
Cricketers	-	-	-	-	1	-	-	-	-	-
Pilots	-	-	-	-	1	-	1	-	-	-
Engineers	-	-	-	-	-	-	1	-	-	-
Librarians	-	-	-	-	-	-	2	-	-	-

Table 7. Professional occupations in endorsed textbooks

Practical Occupations	Gulmohar English		Sanjeevani Social Studies		Current Vision English		Sungava Nepali		KEDC Science	
	M	F	M	F	M	F	M	F	M	F
Clowns	7	-	-	-	2	-	-	-	-	-
Drivers	1	-	2	-	7	-	2	-	-	-
Gate keepers	1	-	-	-	-	-	-	-	-	-
Cobblers	1	-	-	-	-	-	-	-	-	-
Tailors	-	1	-	1	-	-	-	-	-	-
Milk person	-	-	-	-	1	-	-	-	-	-
Hair cutter	-	-	-	-	4	-	-	-	-	-
Farmers	-	-	11	6	2	-	7	2	1	-
Shopkeepers	-	-	5	10	3	-	2	1	-	-
Construction workers	-	-	1	-	-	-	7	7	-	-
School caretaker	-	-	1	-	-	-	-	-	-	-
Potters	-	-	-	-	-	-	1	-	-	-
Porters	-	-	-	-	-	-	1	-	-	-
Driver	-	-	-	-	-	-	2	-	-	-
Grass cutter	-	-	-	-	-	-	1	1	-	-
pundit	-	-	-	-	-	-	1	-	-	-
cow herder	-	-	-	-	-	-	1	-	-	-
cleaner	-	-	-	-	-	-	2	-	-	-
Total occupations	17	4	31	21	36	21	45	21	8	1

Table 8. Practical occupations in government endorsed textbooks

As we see in Tables 7 and 8 above, gender gap in occupations can be seen in all textbooks as all the textbooks have more males than females in the occupations. Also, the males are portrayed in a wider variety of occupations than females. If we compare this table with the table depicting occupations in government textbooks, we can see that there is relatively smaller gap (cf. Table 2 in section 4.4.2). In Government publications, except for the Nepali language textbook (Government of Nepal, 2019), all other textbooks have included more images of women in occupations. Also, it can be concluded that government published textbooks have females in wider range of occupations than the other publications. Therefore, a more even representation of gender in various professions and occupations emerged in the government publications.

5.2.4 Indoors or Outdoors

Indoor activities may be more likely to be oriented towards the home and depict domestic settings, whereas outdoor settings are more likely to depict occupations or some form of action. When the selected images were grouped into outdoor or indoor settings, Om, Ramesh, Saroj, Chandra, and Sanjog (all five boys) chose images set in clear outdoor settings (see Figures, 21, 22, 23, 26, and 27 and two participants Sita and Deepa chose images with clear indoor settings (see Figures 19 and 20). The images with outdoor settings were selected by male participants whereas the images with indoor settings were selected by females. Three images selected by female participants have no setting indicated in the image.

Again, the selected images were seen to be part of a range of images contained in the textbooks, and a content analysis of these images was carried out. While categorising images into indoor and outdoor, clear hints of indoor setting and outdoor setting were considered. In some cases, outdoor games like football, cricket, and cycling were grouped in outdoor without any hint of other setting details as these activities are mostly performed outdoor. To test whether females were more likely to be depicted indoors and males outdoors, the number of females and males were counted. In the images showing group indoor or outdoor activities with both male and female characters, one male and female was counted.

Textbooks	publications	indoor			outdoor		
		M	F	total	M	F	total
Other publication							
(Gulmohar) English Language	Black Swan	16	22	38	70	40	110
(Sungava) Nepali language	Green House	28	23	51	67	52	119
(Sanjeevani) Social Studies	Sanjeevani	26	30	56	128	96	224
(Current Vision) English	Brain Train	49	37	86	37	17	54
(KEDC) Science	KEDC	23	15	38	195	121	316
Government publication							
Social Studies	government	37	27	64	163	161	324
Nepali Language	government	21	19	40	104	97	201
Mathematics	government	2	2	4	23	20	43
English language	government	18	21	39	71	50	121

Table 9. Indoor and outdoor spaces in endorsed and government publications

As Table 9 suggests, all the textbooks except *Current Vision English 1* (2020) have emphasised more outdoor activities than indoor activities. Altogether, four textbooks have challenged the traditional gender indoor/outdoor space dichotomy by presenting more and equal males in the indoor settings which is a progressive message through the textbooks. Among these, a textbook belongs to outside publication (*Sungava Nepali Shrinkhala 1*) and three are by government publication (*Hamro Serofero Kakshya 1*, *Mero Nepali Kakshya 1*, and *Mero Ganit Kakshya 1*). Moreover, though fewer females are in outdoor activities in contrast to males, this gap is reduced in the government textbooks more than the other publications.

Overall, it can be said that government published textbooks are relatively more equal in depicting gender equality in indoor and outdoor activities. It can be implied that government publishers are more aware of the changes in the policies that prioritise gender equality as a significant aspect in the education materials.

5.2.5 Same-gender Preferences

In the choice of images, covert same-gender preferences can be seen. This tendency was also reflected in their interviews and drawings.

Among five boys, four have chosen images with both genders. Saroj chose an image depicting only one male (see Figure 23) even though there are females as an audience. Om selected an image because of the clowns (see Figure 21) and according to him, only boys can be clowns. None of the boys have chosen images with only girls. Also, when Ramesh (see Figure 22) was asked to choose his favourite things from the selected image, he chose 'boy' at first among human characters.

Though girls were flexible in choosing images with only boys (Figure 28), Urmila and Sita have chosen images with only female characters (see Figure 19 and 20), and Deepa and Prema have chosen images with both genders (see Figure 24 and 25).

As will be noted below, same gender preference is also evident in the participants' drawings with two female participants made by Urmila and Deepa (Figures 30 and 34) having made only female characters in their drawings. A total seven out of ten participants suggested same-gender preferences indicating a covert inclination toward their own gender through these drawings.

5.3 Findings from the Children's Drawings

Each participant was given a title to design a cover image representing one of their mandatory textbooks. They showed their confusion at first regarding the types of objects they could include for their covers image drawings. When the researcher explained that they could draw anything they wanted and use any colours, they were happy. However, it may be that this explanation shifted the focus for some children away from the idea of drawing a textbook cover. It seemed that rather than being influenced by the textbook title, young students were influenced by the images that they had seen in their textbooks, peers' drawings and the pictures stuck on the classroom wall. The content analysis of their drawing showed the emergence of several key themes.



Figure 29. Nepali textbook cover drawn by Sita



Figure 30. English textbook cover drawn by Urmila

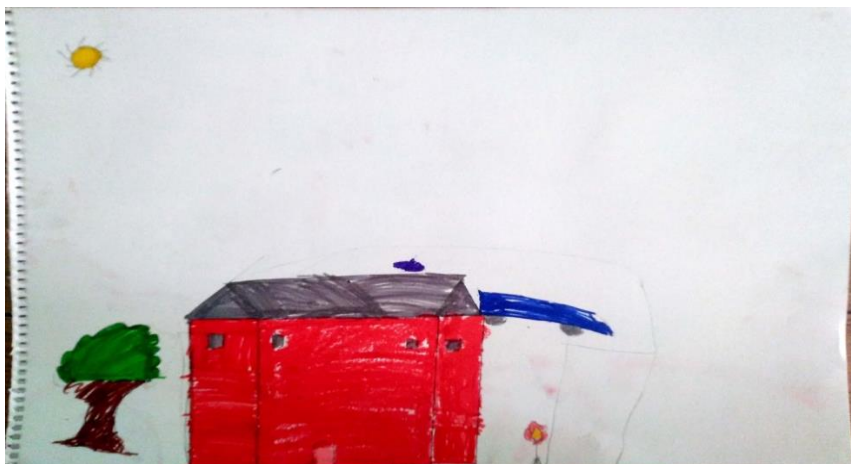


Figure 31. Social Studies textbook cover drawn by Om



Figure 32. Science textbook cover drawn by Ramesh

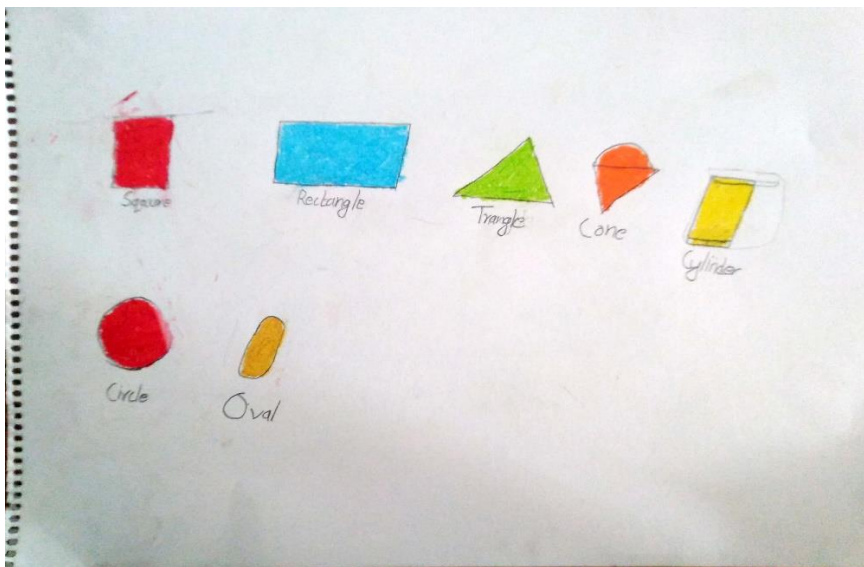


Figure 33. Mathematics textbook cover drawn by Saroj



Figure 34. Science textbook cover Drawn by Deepa



Figure 35. Nepali textbook cover drawn by Prema



Figure 36. English textbook cover drawn by Chandra



Figure 37. Social Studies textbook cover drawn by Sabya

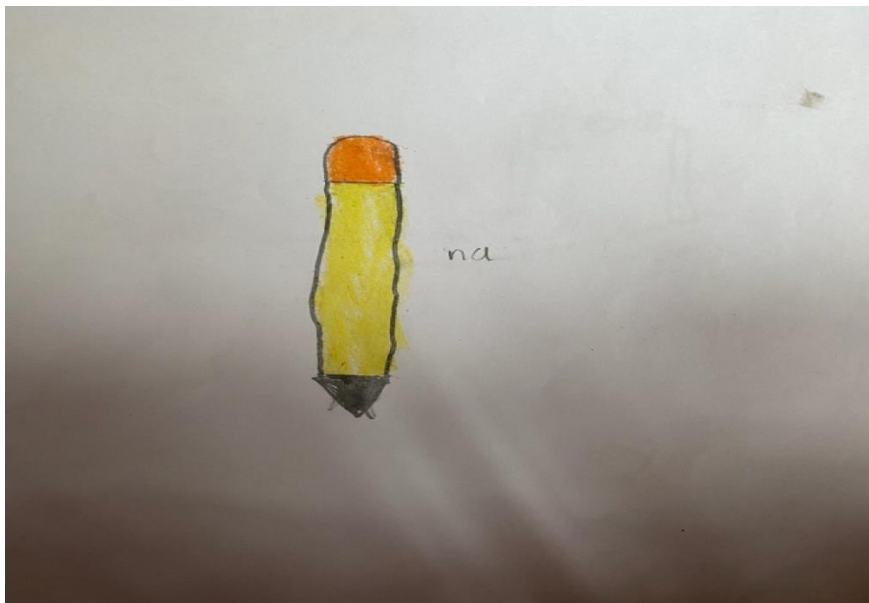


Figure 38. Mathematics textbook cover drawn by Sanjog

5.3.1 More Commonalities than variations in drawings

Even though participants from various ethnic backgrounds and geographical locations were selected for data collection, it was surprising that there were no specific cultural variations seen in the data. Their images and oral descriptions did not say anything about the indigenous background and knowledge of the participants.

The themes emerging from this analysis showed that houses and flowers were the most commonly represented subject of the drawings. Although the interviews indicated that for

some children, the house represented a socialising space to share friendship and a space of familial gender roles enactment. Following the themes identified in the textbooks, the drawings by the children were examined for their use of cultural representation and gender representation as well as the use of colour.

5.3.2 Reflections of the Nepalese Social Cultural Context

Various national cultural symbols are reflected in the participants' drawings. This can be seen in the images of flags made by Urmila and Sabhya (Figure 37 and 28). Though not appropriate colours, these flags resemble the double triangular flags of Nepal with which the children would be familiar. One of the national objectives of school education is to prepare a citizen who is committed to the values of the federal democratic republic, nation, nationalities (Government of Nepal, 2019).

All the textbooks published in Nepal and included in this study contained images of national flags. Nepali language textbook published by government had the maximum numbers of flags, whereas no flags were found in *Gulmohar: Language for Life Reader 1* (Bhaskaran, 2014) and *KEDC's Science, Health and Physical Education* (Nepal, 2020). The reason for not having any image of flags might be because of its overseas publisher or different focus of the course content. Nevertheless, it can be concluded that most of the textbooks had images of flags as a symbol of national unity and integrity and most of these flags in the textbooks were presented on school premises. Not only in the textbooks, but national flags are also an important display at school premises, in government documents, on government vehicles, and in government offices. Thus, the influence of this greater lived experience is seen in the children's images.

5.3.3 Houses, Gender and Household Responsibility

Similarly, the houses in these drawings reflect the social cultural emphasis on houses in Nepalese society. Houses are one of the most repeated content features of the drawings, along with flowers. Altogether six participants have made houses in their cover images (see Figure 30, 31, 34, 35, 36, and 37). These houses were made on the cover images belonging to English (by Chandra and Urmila), Social Studies (by Om and Sabya),

Science (by Deepa), and Nepali (by Prema). All the houses drawn by the participants resembled the houses seen in the textbooks with rural Nepalese contexts rather than the houses they actually lived in, that are generally flat roofed concrete buildings. The slanted-roofed houses are basically found in the rural parts of Nepal that are made from rocks, mud, and wood in the mountains and hills whereas, the houses in the *terai* are made from straw, mud, wood, and tiles.

The images of houses in the textbooks were analysed to identify what types of houses were dominant in them. The houses in textbooks were grouped into traditional and modern houses. The thatched-roofed houses, the houses with tile or tin roofs, and traditional building structures were grouped in traditional houses and the houses other than that were grouped into modern houses.

The data regarding house types indicated all the textbooks except *Gulmohar English* contained more traditional houses. One of the potential reasons for this could be because *Gulmohar English* book was published outside Nepal. This could be motivated by the representation of majority of lifestyles in government publications because these are the only books that are used in rural areas and in all the government schools across Nepal. Both rural areas and government school are populated by people belonging to lower economic classes who live in traditional houses rather than in modern houses. The popularity of the traditional houses in the textbooks might be one of the possible reasons for the participations' drawings of those houses.

The images of houses in the textbooks are always seen accompanied by trees and flowers nearby. This is also found in the actual social context of Nepal. Flowers and plants are usually planted in the front or the back yard of the houses, even in urban settings, with modern houses. Besides any utility purpose, trees and flowers have an aesthetic purpose. The analysis of the images of houses drawn by the participants also shows some plants and flowers nearby (see Figure 30, 31, 34, 35, 36, and 37).

5.3.4 Friends and Family

Urmila, Prema, Deepa, and Chandra have drawn human characters and have positioned them on the periphery of the houses. These characters are either in the houses, coming to the houses, or working around the houses where they reside. The interview data revealed that these characters are family members or friends except for Chandra who labelled the characters as a boy and a girl. Deepa has drawn a friend visiting her and she is welcoming her friend at the door (see Figure 34). Prema has drawn an image with several human characters (see Figure 35), that she described as a mother, brothers, and sisters. Lastly, Urmila's image presents two humans who are a mother and her daughter (see Figure 30).

It can be concluded that the majority of human characters made by the participants were projected in family relations and friendship. Even though Chandra referred to his represented characters as a boy and a girl, their physical closeness and coming home together suggest their close connection. The characters' activities and their connection suggest a Nepalese emphasis on family, friendship, and cooperation.

A compositional analysis of the drawings by the children was carried out, but any findings must be treated with caution. Firstly, the age of the children would suggest that they have limited skills in representational drawing. Secondly, shot distances (how closely the image contents are portrayed in relations to the viewer) might be affected by the number of items they are presenting in their image and the way they are taught to use space in the notebook. For example, children in Nepal are taught to write from the top left corner down to the bottom right. Also, children from middle-class backgrounds tend to use materials economically. Their represented social distances might also be informed by the social and cultural context of Nepal where public display of affection especially between adults is not appreciated.

As stated above, only limited participants Urmila, Deepa, Prema, and Chandra have human characters in their cover image drawings. One of the important features of the character distance in these images is that the distance between these characters is influenced by the tasks they are doing and not by their actual social distance. Thus, the distance seen in the images might not mention the actual personal relationship of the characters in all the representations. However, there are examples of close personal

relationships in the images drawn by Urmila (Figure 30), Deepa (Figure 34), Prema (Figure 35), and Chandra (Figure 36). Urmila presents two identical figures from a far personal distance showing a close connection between mother and daughter. Deepa shows two friends meeting at the doorsteps showing their close relationships. Chandra's image shows a close personal distance between the boy and girl coming home. Unlike other cover image drawings, Prema's drawing has five human characters. However, their distance suggests their activity locations rather than their relationships. In this image, the mother is cooking rice in the kitchen, a brother and a sister are studying together in another room, a brother is filling water from the handpump outside the home, and a sister is cleaning the front yard. Except for the younger brother and sisters studying, all other characters are working at a distance where they can see or hear each other but are not at a personal distance. However, this does not suggest detachment in their relationships as all of them belong to a family performing various activities.

These connections and disconnections based on the distance between the objects may be influenced by participants' understanding of their connections with other objects in their drawings. However, this analysis has not demonstrated any significant trends in social relationships, beyond an acknowledgement of the closeness of family and friends.

5.3.5 Colour and Cultural Significance

Colour can also have cultural significance. Participants have used yellow (by eight participants), green (by eight participants), blue (seven participants), orange (by six participants), and red (by five participants) colours as the popular colours. Other colours are brown and black shades used by four participants followed by pink. No gendered pattern was found among the participants in this research as the bright red shades are more used by boys and cold shades, such as blue are popular among girls. This use of colour is probably informed by the eastern cultural practice where there is no such gender distinction in colours.

Most Nepalese people follow Hinduism, with Buddhism being the second most followed religion. In these religions, colours have special significance and use. In particular,

yellow, orange, and red colours are one of the most used colours in Hindu religious contexts. Yellow and red colours are used while worshipping gods and goddesses, these coloured clothes are used in specific ritualistic performances such as *Bratabandha* (a ceremony for boys in which they receive a sacred thread), marriage, *Pasni* (rice feeding ceremony), priests' traditional wear, dead body covering, etc. Hindu gods and goddesses are also represented by wearing yellow and red coloured clothes. The red colour is regarded as auspicious colour, a colour of life, and good luck. Moreover, festivals like *Holi* (festival of colour), and *Tihar* (festival of lights) make use of bright colours and people from various cultural backgrounds take part in these festivals.

Similarly, Buddhism also uses various colours with special significance. Prayer flags are the most common entities used around Buddhist shrines that use blue, yellow, white, and green colours. Buddhist monasteries make use of yellow, orange, white, and red colour for colouring shrines. Besides, monks use maroon, yellow, orange, white and pink robes. Unlike Hindus, Buddhists also use yellow and white colour for *tika* (a special-coloured rice or colour worn on the forehead on various occasions) instead of red. The religious paintings like *Thangka* (paintings made on clothes) and the images of various Buddhas also make use of various colours like yellow, green, red, and blue.

Cultural associations with colour may not completely explain the use of colour in these drawings. Another reason for use of green and blue colour may be the influence of the natural environment of Nepal. The green colour is associated with fields, trees, and shrubs and the blue colour is associated with sky and water. The participants may have been influenced by these everyday sights.

5.3.6 Social Cultural Influence in the Activities Depicted in the Drawings

The four participants (Urmila, Prema, Deepa, and Chandra) who had included human characters in their represented cover images were asked about activities. Chandra (see Figure 19) explained that his characters were a boy and a girl coming home. Here is a part of the conversation:

R: What are the boy and girl doing in the image?

Chandra: Going home.

R: What will the girl and boy do after going home?

Chandra: The girl will cook food. The boy will read.

R: And, what else?

Chandra: The girl will wash utensils and the boy will sleep.

R: And?

Chandra: The girl will go to buy vegetables. The boy will wash face.

In this conversation, Chandra has internalised that it is the 'girl' who cooks food and washes utensils. According to him, females take part in buying groceries needed at home which is indicated by his sentence. It can be inferred that in comparison to the girls, boys seem quite free and relaxed at home.

Deepa drew herself and her friend in the cover image (see Figure 34). Her image tells a story of friends who are neighbours. In the image, her friend has come to visit her at her doorstep. Though invisible, she reports that her father and mother are also at home. Here is a portion of the conversation with Deepa:

R: Which one is your house, and which one is your friend's house?

Deepa: This is my house. This is Priya's. *(She pointed to the bigger house as her house and the smaller as her friend's)*

R: Where is your friend?

Deepa: She is here. *(She points to a figure in front of her house)*

R: What is your friend doing?

Deepa: She is visiting my house.

R: Where are you?

Deepa: This. *(She points at another figure at the door)*

R: Who washed these clothes?

Deepa: Mom

R: Where is your mom?

Deepa: She is sleeping.

R: Where is your father?

Deepa: Father is working in the kitchen.

R: What else mom does?

Deepa: She cleans toilet.

R: What do you do at home?

Deepa: I do nothing.

Prema also described the characters from the image in human relations (see Figure 35). She drew the largest number of characters and activities in her cover image. Her activities also suggest her understanding of various tasks and their relation to gender. She said she had drawn a mom, two brothers and sisters in the image. Here is what she said in the interview:

R: Which one is the mom?

Prema: This. *(She pointed to an image of a human on the left side)*

R: What is she doing?

Prema: She is cooking rice.

R: Can you show me the brother and sister in your image?

Prema: They are brother and sister. *(She pointed to the humans on the right-hand side)*

R: What are they doing?

Prema: They are studying.

R: Where is the sister in the image?

Prema: Here *(she pointed to the character in front of the house).*

Big sister is cleaning with a broom.

R: Who is this person and what is he doing? (I pointed to a character who is near the water pump)

Prema: He is big brother filling water.

R: Where is the father?

Prema: He is abroad.

R: Who washed these clothes?

Prema: Mom washed these clothes.

Lastly, Urmila (Figure 29, first from the right) said that she made herself and her daughter in the image. And according to her, they were just standing outside.

R: Who are these people?

Urmila: Me

R: And another person?

Urmila: The child of that person.

R: Where are these people?

Urmila: They are standing.

R: What are these people doing?

Urmila: Just standing.

Urmila understood the word ‘where’ as both place and action suggesting word. This shows that Grade 1 students have limited verbal resources. However, based on the description of the activities by the participants it can be concluded that participants were speaking from their specific experiences and understanding of various activities. Most of them associated cooking, washing, and cleaning activities with women because of the greater social reality of Nepalese society (Government of Nepal, 2011, Rothchild, 2007).

The textbooks used by these participants were explored along with the government published textbooks to see how males and females were distributed in the works represented by the participants. The total number of overall household activities including cleaning/washing and cooking are already presented in the Table 1 in the previous chapter. However, this exploration was especially regarding cooking and cleaning/washing (cleaning house and washing clothes/utensils) activities. The findings are shown in the table below.

Textbooks	Cooking		Washing and cleaning	
	M	F	M	F
Other Publication				
Sanjeevani Social studies	2	7	8	18
Sungava Nepali language	1	5	3	5
KEDC Science	1	1	4	2
Gulmohar English	1	1	-	-
Current Vision English	1	3	-	-
Total	6	17	15	25
Government Publication				
Social Studies	3	6	10	13
Nepali Language	1	3	1	3
Mathematics	-	-	2	2
English Language	-	-	-	1
Total	4	9	13	19

Table 10. Cooking and cleaning activities in endorsed and government publications

It can be noticed that in all government publications except in Mathematics, females are dominant in the cooking and washing/cleaning activities. However, Science and Gulmohar English by other commercial publishers have maintained equality in cooking activity though females are still dominant in washing and cleaning activities. A greater gender gap in these activities can be seen in the social studies and Nepali language textbooks from both sets of publications. A potential reason for this is that the contents related with these textbooks are focused more to the Nepalese social lives unlike other textbooks. Strangely, the Science textbook endorsed by the government has more women in cleaning and washing activities, something that indicates all types of textbooks can have gendered contents.

Among washing and cleaning, more men are presented doing cleaning rather than washing clothes or utensils in the textbooks. This is guided by Nepalese social norm that restricts males from washing clothes or utensils and expects female members to fulfil this responsibility. Men can be found doing these tasks only when they live alone or in some context where they are responsible for washing their own plate after eating from it, or

their individual clothes, whereas females are responsible for doing all the laundry and all the washing up. This cultural gendered norm is overtly presented in the textbooks.

Nevertheless, the books published by Curriculum Development Centre were relatively more even-handed in their depiction of males and females in domestic activities.

Mathematics and English textbooks have avoided these contents to seem relatively less gendered in terms of these activities. Both textbooks and participants' images reflect the Nepalese social norms of women's role in cooking and washing/cleaning activities.

5.3.7 Everyday Objects in the Drawings

In carrying out their drawing task (Figures 29, 30, 31, 32, 33, 34, 35, 36, 37, and 38), most of the participants selected objects that were common and familiar to them in their cover image drawings. These objects included flowers, houses, flags, plants, water resources, suns, a butterfly, apples, a heart shape, a pencil, and a car. As already noted, six participants drew houses and incorporated other cultural artefacts, such as flags. Three of the remaining drawings by Om, Sita, and Sanjog represented common objects that children encounter in their surroundings and their textbooks. The final drawing by Ramesh (Figure 32) was more of a design-focused abstraction of the Nepalese countryside.

Both Sita and Prema were requested to draw a Nepali language textbook cover. Sita drew objects such as flowers, a butterfly, a heart shape, and two balloons (Figure 29). It seems that she is influenced by her own Nepali textbook cover as there is also an image of flower on it. Likewise, for the same cover image, Prema drew a house, human characters doing various things, birds, plants, a cloth hanger, and a river (Figure 35).

English language textbook cover design was allocated to Chandra and Urmila. Chandra drew a house, human characters, an apple tree, flowers, a sun, clouds, and other houses (Figure 36). Urmila drew houses, humans, flags, and flowers for the same textbook cover (Figure 30).

Deepa drew houses, humans, clouds, a sun, a flower, a pond, a rock, and a cloth hanger for the science cover (Figure 35) whereas, Ramesh's science cover included a multi colour abstract natural sight of Nepal (Figure 32).

The mathematics cover was designed by Saroj and Sanjog. Saroj drew various shapes and named them (Figure 33) however Sanjog just drew a pencil (Figure 38). Shapes were also seen in the mathematics textbook cover used by them. A pencil is something children use every day in school and at home while writing. It seemed that Sanjog wanted to complete the task instead of taking time drawing multiple objects, suggesting he might be a child who wants to impress the teacher by completing the task as soon as possible.

Nevertheless, Sanjog's pencil might also represent something that he could draw the best.

Sabhya and Om drew the social studies cover images. Sabhya drew a big house with a flag on the top and a flower (Figure 37) whereas Om drew a car beside the house and a cloud of smoke as something related to the car (see Figure 31). This image of the car may have indicated his living circumstances as he belonged to a high-class family who owned a family car.

Some images drawn by participants contain various details about the Nepalese social context. We can see clothes hanging near the house in the images by Deepa and Prema (see Figure 34 and 35). These drawings portray a popular way of sun drying clothes in Nepal. The clothes were not hanging on modern/commercially available cloth hangers, lines, or driers, but in a home-made drying spot made by using two poles and a rope tied between them. Prema's image also contained two pumpkins on the rooftop. This is a traditional method of preserving ripened pumpkins that is still used in various rural parts. When people want to preserve ripened pumpkins, they put them on the roof where the sun is not obstructed. They keep stalks attached to the pumpkins and paste cow dung on the top of the stalk. A handpump seen in her image and a river nearby represented the source of drinking water in Nepal.

Moreover, flowers, houses, sun, water resources, and national flags are everyday sights in Nepal. Thus, the objects drawn by participants represented their familiarity, preferences, and capacities with drawing at the time of drawing the images.

5.3.8 Two Unusual Drawings

Two drawings stood out as being different from the rest of the images. One was the image drawn by Ramesh (see Figure 32), and the other was drawn by Saroj (see Figure 33). Saroj's image was the only image that focused directly on the course content of the textbook he was asked to design. Ramesh's image was intriguing through its level of abstraction.

Saroj was asked to make an image of the mathematics textbook cover and he drew various shapes in his cover image. It was noticed that in the cover image of mathematics textbooks there were various shapes along with other things. Not only did he make shapes, but he also wrote their names.

Below is the portion of the interview about his cover image.

R: Which book cover is this?

Saroj: "Maths."

R: What have you made?

Saroj: "Square, rectangle, triangle, cone, circle, cylinder, oval this much"

R: How did you decide to make this image?

Saroj: (No answer)

R: Have you seen these images in the maths book?

Saroj: "Yes, I have seen them."

Ramesh's image (see Figure 32) contained a colourful block. At first, this was difficult to discern, but his description enables the viewer to understand it as a book cover for a science textbook. When Ramesh was asked about his image, he said he had drawn mountains, sky, road, water, cloud, and grass. Here is an extract from that interview:

R: Can you tell me what have you made?

Ramesh: "Mountains are on the top."

R: Which colour is the mountain?

Ramesh: "Blue colour"

R: What is the green coloured part above the blue colour?

Ramesh: "Sky"

R: What is this (white colour) spot?

Ramesh: Cloud

R: Which colour is the road?

Ramesh: "Orange"

R: What is this yellow-coloured thing?

Ramesh: "Water"

R: And the green colour below?

Ramesh: "Grass"

In this image, Ramesh had made various things and according to him, it was a scene. He has used some unconventional colours according to his vision instead of their usual appearances. For example, the sky is green, the water is yellow, the road is orange, and the hills are blue.

These images tell how children can be unique in their expression regarding the allocated tasks.

5.4 Conclusion

This chapter presented findings from the children's selected and cover image drawings in two different sections. The findings demonstrated some socio-cultural and gender aspects reflected in both the selected and cover image drawings. For example, both the drawings and the selected images represented some household tools, household responsibilities, and character distance informed by the socio-cultural context of Nepal.

There were some gendered differences in their chosen images representing occupations and indoor/outdoor activities. Male participants selected images with occupations and

females' selection did not represent any occupations. Likewise, male participants' selection had outdoor activities whereas females' selection had indoor activities. When this was investigated in the context of textbook representation of occupations and indoor/outdoor settings, it was found that the textbooks also reinforced these ideas as there were more males in outdoor activities and in occupations.

Moreover, the findings suggested that the children had internalised the hair length and gender-specific dress as identifying features for the male and female characters in the images. The interviews demonstrated that they also regarded some household chores like cleaning and cooking as a female's job. The textbook images also reinforced these ideas in the image contents and activities as most of the characters in the textbooks were in gender-specific dresses and more women were in the household chores although most textbooks had tried to balance these representations. Furthermore, children had a tendency of same-gender preferences as both male and female participants revealed their covert inclination toward their own gender while choosing and drawing images. They represented familiar objects/activities in their images.

The significance of the findings set out in this chapter and in the previous chapter, 'Visual Images and Interpretations: A Semiotic Analysis of the Textbook Covers,' will be explored in the next chapter, 'Chapter 6: Discussion'.

6. Discussion of Results

6.1 Introduction

The main purpose of this study was to examine the gender roles, activities, and relations in the cover images of Grade 1 textbooks, and the perception of gender roles as expressed in children's own drawings and their chosen images as explained by them in a short interview. Additionally, the study also presented a comparison between the government published textbooks for Grade 1 and those from other publishers endorsed by the government and used in the schools studied. The findings in regard to gender as well as cultural expressions have been described in the previous chapters. This chapter discusses these findings, positioning them within the recent developments in Nepalese education policies and the new constitutional provisions toward gender equality (Rana & Koirala, 2021), as well as in the context of the literature. This chapter is divided into four sections. The first section considers gender equality in the cover images, the second reflects on the relationship between national policy and its implications for textbook covers and illustrations, the third discusses the reality depicted in the students' drawings and selected images compared with the ideal presented in government policy on gender equality, and the fourth section discusses the methodological approach that has been used in this research in relation to others in the literature.

As a preface to this discussion, it is important to re-iterate the theoretical approach of this study and the differences from much of the literature on gender in textbooks that this leads to. This study contributes to the field of gender theory in the context of gender equality, social change, and women's empowerment. It is underpinned by Connell's (2002) and Rothchild's (2007) approach of gender as a process embedded in social structure and relationships while exploring gender relations, roles, and activities.

Government policy documents regarding gender equality and the broader human rights documents are consulted to contextualise the gender issues reflected in textbooks and children's representations. This theoretical stance is significant from the point of view of the current research questions and research context.

In contrast to this study, some studies on textbook images have explored various issues using several theoretical stances such as a patriarchal and citizenship perspective (Agha et al., 2018), and a decolonisation perspective (Hoffman, 2019) to explore social issues in the textbooks or picture books. However, most of the textbook studies have used a feminist perspective (Chick et al., 2010; Cela, 2016; Gebregeorgis, 2016; Kostas, 2019; Setyono, 2018) to explore the gender issues, with some focusing on sexism in both language and illustrations (Gouviassa & Alexopolous, 2018). This study takes a broader gender perspective that gives equal emphasis to the impact of gender inequality on males and females alike (Connell, 2002), in line with the policy direction of the Government of Nepal to work towards gender equality.

6.2 Gender Equality in Grade 1 Textbooks

The findings challenge the Global Education Monitoring Report that claims no change in teaching materials (Bhattarai, 2020) had occurred to shift the perspective in gender roles. Rather, this study of the cover images and other illustrations across the curriculum for Grade 1 demonstrate that textbooks depict gender roles, activities, and relations in the Nepalese context, and the comparison between textbooks over time show a shift towards greater equality reflecting the new constitutional change and the change in social policies in Nepal (Rana & Koirala, 2021). It is important to note that at the time of data collection, in 2020, the textbooks for Grade 1 were the only new textbooks to support the new curriculum. This section discusses the topics that address a clear shift seen across the curriculum cover images and other illustrations in gender roles, activities, relations, appearances, image contents, and spatial organisation.

6.2.1 Cover Images Closer to the Desired Ideal

Studies of gender relations in textbooks are mostly explored in terms of power relations, with findings that claim these power relations as unequal and suppressing females due to inadequate representations and unequal representations in various social positions, roles, and stereotypes (Gebregeorgis, 2016; Hunter & Chick, 2005; Mustapha, 2015). However, in previous studies, there has been less attention to the relationship that can be created

between the characters in the illustrations and the audience for the textbooks, that is, the school children. This study has shown that the closer audience-character connection and the connection between the characters in the new cover images attempt to give a feeling of attachment to the audiences. The new Nepalese textbook cover images demonstrate a shift toward a closer interaction between audience, that is, the children in Grade 1, and the characters, shown through the compositional analysis of the images. Similarly, they communicate a closer connection between the characters themselves by projecting them in closer social distance (Kress & Van Leeuwen, 2006) and engaged in the same activity. Through these changes, it seems that the textbook covers are designed to establish a relationship with the audience that focuses on gender equality.

6.2.2 Greater Equality in Gender Roles, Activities, and Relations

A change in the gender roles among the images of adults depicted is seen in the newly published textbook covers and illustrations. Females are shown in a range of occupations outside the house, both males and females are almost equally involved in household chores, both mothers and fathers are presented in family settings, boys and girls are involved together in a range of play and other activities together, including a girl's participation in a ball game previously seen as an activity for boys. These images represent gender progressive contents in textbooks, in line with government policy.

Attempts to include male characters in household chores in the textbooks images were found in the content analysis although women still dominated in cooking and washing activities quantitatively in the Social Studies and Nepali language textbooks. This finding would seem to both support and challenge findings in the literature. On the one hand, it can be seen to be in line with studies that found females' dominance in household chores in textbook contents (Agha et al., 2018; Fadhila, 2022; Gouvias & Alexopoulos 2018; Yasin et al., 2012). On the other hand, it challenges the representation of only females in household chores and childcare responsibilities by presenting males in these roles. This gender progressive message aligns with the new constitution's commitment to end all types of discriminations including gender and with the various strategies implemented by School Sector Development Plan (SSDP) (Government of Nepal, 2016).

Although there are limited studies focusing on textbook images in Nepal, previous studies found heavy male dominance in the illustrations which often depicted gender stereotypes (Joshi & Anderson, 1994; Rothchild, 2007), female invisibility in illustrations (Srivastava 2006), and no occupational representation of females, and no females in professions (Joshi & Anderson, 1994). In contrast to these studies, this study found a greater leap to promote female visibility and gender equality in households, as well as in a variety of occupations and professions.

Another area where a shift in gender is apparent in the current cover images is in the representation of traditional gender specific play activities for children. This change indicates that the textbook contents would be expected to focus more on the activities that promote greater gender equality. Previous studies from around the world claim gender bias in activities in the contents of the textbooks (Albers et al., 2009; Gebregeorgis, 2016; Yang, 2016). However, whether this is the case for these Nepalese textbooks is beyond the scope of this study and left for future exploration.

Simultaneously, a change in these new curriculum cover images can be noticed in the images depicting collaborative activities between male and female characters and avoiding individual activities. Studies claim that collaborative play and activities encourage social skills (Hyvönen, 2008; Ruipérez-Valiente & Kim, 2020; Stiff & Kedra, 2020; Tolmie et al., 2010), and gender equality (Buffum et al., 2015; Hyvönen, 2008; Zabanitou, 2020) in learners. Thus, on the one hand the focus on collaborative activities in the images can be seen to encourage mutual harmony and respect which is one of the prioritised national objectives of education and curriculum (Government of Nepal, 2019). On the other hand, by showing a collaboration between male and female, there is an attempt to promote gender equality. Thus, it can be concluded that a positive message is communicated through gender representation in the cover images (Buffum et al., 2015; Hyvönen, 2008; Spinner et al., 2018; Zabanitou, 2020). However, this positive message is not represented across all the textbooks used by Grade 1 children in this study. In contrast to the government textbook covers, government endorsed textbook covers suggested greater gender imbalance on their covers as the ones that projected human characters had

only males on them. The illustrations relating to occupations, and outdoor and indoor activities, also revealed gender disparity in contrast to the government published textbooks. This calls for more detailed comparative studies between government and other publications as non-government published textbooks are one of the most used resources in Nepalese private schools.

6.2.3 Gender Equality or Westernization?

This study noted that the characters are mostly portrayed wearing gender specific clothing along with gender specific hair length in images of both old and new textbook covers indicating a biological difference of gender. This finding supports other similar findings claiming stereotypical gender appearance in other textbook studies around the world (Gebregeorgis, 2016; Weitzman et al., 2003; Yang, 2016). Although Joshi and Anderson (1994) in their study found that the gendered uniform code in the Nepalese schools promoted a biologically-based gender distinction (Connell 2002), there has been no study in the Nepalese context regarding gender appearances in the contemporary textbooks.

However, not all images studied here present gender specific clothing. It appears that the textbooks produced by the government have attempted to present gender progressive content to support social construction of gender (Connell, 2002) by presenting characters in alternative clothes and hair norms. Content analysis of government published textbooks showed a move away from the stereotypical appearance of girls as a small number of girls in the illustrations are seen wearing shorts and t-shirts, just like the boys. There is even a counter stereotypical image depicting a boy wearing *Kurta Suruwal* (a female specific dress) as his favourite dress is presented in Nepali language textbook (Government of Nepal, 2019 p. 12). I argue that this bold representation, even though it is a single illustration, suggests that the textbooks have attempted to break the stereotypical attitude toward gender specific clothing. The representation of male and female children in shorts and t-shirts can also be explained by the Western influence in Nepalese education, for none of the cover images represent Nepalese local costumes. Though not directly about the clothes, general western influence is often criticised by scholars as being responsible for threatening local identities (Luitel & Tylor, 2005; Subedi, 2020;

Wagle et al., 2019). However, the clothing depicted would seem to relate to the everyday reality for the majority of children.

Apart from clothing, it appeared that gender representation varies according to the course contents. The findings revealed that English and Mathematics textbooks presented a higher level of gender parity than Nepali and Social Studies textbooks. This may be because the gender disparity suggested in the Social Studies and Nepali language textbooks came from Nepalese social cultural context; however, English and Mathematics could avoid such contexts as the focus of these course is learning a foreign (Western) language and calculations.

The findings from the textbooks from government-endorsed publishers in this study suggest that although a cultural disconnection and gender disparity were apparent on their covers, all these textbooks contained images indicating cultural representation in their inside contents except a book by foreign publication *Gulmohar English*. Surprisingly, some of them also had more cultural images than the government produced textbooks. It might be possible that it is the dominance of cultural images in the government endorsed textbooks, especially in Social Studies and Nepali language textbooks, that has led to the gender disparity apparent in the analysis of these books. However, this question is left to be explored by other researchers in the future.

6.2.4 Impact of National Objectives on Images

Textbooks are used as instruments to create a unified national identity discourse avoiding cultural pluralism (Mohammad-Arif, 2007). It appears that the cover images continue the nationalist discourse that is focused on specific geography, community, and religion (Ahearn, 2004; Lawoti, 2010; Srivastava, 2006) and in creating a boundary from others (Bhandari, 2016). Nepalese political priorities have been reflected in the textbooks developed in various political phases of Nepal (Bennike, 2015). The national objectives list mentioned in the national curriculum framework and basic curriculum (Government of Nepal, 2006; Government of Nepal, 2019) also suggests that the nation endorses its specific objectives through education.

The national objectives, or ‘political will’ as termed by Blumberg (2015), is one of the critical aspects that determines the education policies and the materials, so it has a greater role in gender equality and any social reforms. Blumberg (2015) also argues that if the political will is backed up by the law, the social reforms get stronger support. In the textbooks, we see the impact of the move towards gender equality. Although it seems that the policies are in favour of localised content, cultural diversities are not visible in the cover images. Studies putting greater emphasis on cultural diversity and localised content argue that cultural misrepresentations arise in the context of education because of lack of proper teacher training and motivation, multicultural classrooms with conflicting cultural backgrounds (Dahal, 2018), uncritically imposed western education ideologies (Wagle et al., 2019), and western cultural influence in the name of globalisation (Luitel & Taylor, 2005). Nepal’s state policies have been criticized in the past for being based on hilly nationalism, and more focused toward a particular community (Lawoti, 2010). This study, with its focus on gender equality, has noted the dominance of hilly culture in the new cover images, but a detailed consideration of the representation of hilly nationalism is beyond the scope of this study. However, the conflict between government policies, gender equality, and multiculturalism, is apparent.

The invisibility of multicultural, multireligious, and multiethnic costumes in the images seems to be promoting cultural hegemony and a feeling of disconnection in the audience belonging to various cultural background (Caddell, 2007; Castellsagué & Carrasco, 2021; Luitel & Taylor, 2005; Wagle et al., 2019). Although in the policy level, basic curriculum has made a provision of including 20% local content (Government of Nepal, 2019), this is not visible in the textbook cover images. The cover images across the curriculum partially represent the local content through the icons like hills, mountains, and houses, but exclude other geographical variations like the *terai* region (plains), cultural details, and religious diversities. It seems that the cover images have represented merely urban or semi-urban populations and standardised culture. Although this selective representation of population, geography, and culture may support a government’s approach to developing a national identity, it devalues the nation’s diversities and prescribes a very conservative version of national identities (Caddell, 2007; Mohammad-Arif, 2007),

frames the students into a particular system, and disparages those who cannot reach that position (Caddell, 2007).

A clear gap between policy and practice is noticed in the cover images as they lack local content even though the constitution and education policies have emphasised the need for localised content (Government of Nepal, 2019; Secretariat Constituent Assembly, 2015). The findings from the cover images across the curriculum support findings from the other studies that claim no implementation of local content in school education (Dahal, 2018; Wagle et al., 2019) and culturally biased content in textbooks (Castellsagué & Carrasco, 2021; Srivastava, 2006). In contrast to the cover images, it must be noted that both government-produced and government-endorsed textbooks incorporated images suggesting multi religious, multiethnic, and regional variations except *Gulmohar English*. Lack of cultural images in *Gulmohar English* might be due to its overseas publication as this book is published in India. The rest of the textbooks had illustrations presenting some local ethnic costumes, festivals, icons of religious shrines, religious persons, and local musical instruments. However, the majority of these images still indicated uniformity rather than local diversities.

6.3 The Real and the Ideal in Student Perceptions of Gender

Children's drawings are important as a meaning making activity (Cox, 2005; Hopperstad, 2008), even though many studies indicate that children's images can be influenced by attitudes of parents, teachers, and children themselves (Burkitt et al., 2010; Rose et al., 2006). The findings from the images selected by the students, and the textbook covers they drew, show something about their own understanding of their everyday lives. Existing studies (Bhattraï 2008; Chhetri, 2005; Huxley, 2008; Lawoti, 2007; Maslak, 2003) and government policy documents (Government of Nepal, 2011; Government of Nepal, 2016; Secretariat Constituent Assembly, 2015) indicate that *Dalit* and *Tharu* communities tend to hold traditional views, especially on the position of women. To test this, children whose family names indicate that they belong to a diverse range of cultures, ethnicity, languages, and geographical locations, were selected to take part in this study. However, instead of the expected variations in the choices of the students in this study in

line with their distinct backgrounds, the data suggested uniformity. This challenges the generalisation that *Dalits* and *Tharu* are the most marginalised groups in Nepal (Government of Nepal, 2019; Lawoti, 2010; Rana and Koirala, 2021). The children who took part in this study are enrolled in private schools, and therefore it seems that economic equality in the urban areas is overcoming the gender, caste, and ethnic differences of the past (Panthee & McCutcheon, 2015; Yamamoto et al., 2019).

One of the remarkable findings from the children's drawings and selected images was their reflection of Nepalese cultural contexts; even though these cultural details did not represent the ethnic and indigenous features of the participants' backgrounds. General Nepalese social cultural contexts are reflected in the house types, household tools, clothes drying process, preserving pumpkins, and so on. On the other hand, it should be noted that the children's drawings align with the images of textbook covers that eliminate the cultural diversities, focussing instead on hilly culture.

The children's selected images and their drawings reflect the real, that is, familiar objects, activities, and characters, apart from the houses which were clearly not part of the everyday lives of the children. The question of why the houses were represented in this way is an intriguing one. The generalised data regarding Nepalese social context on the textbook covers and students' images indicates a cultural uniformity rather than diversity. This seeming uniformity takes the learners away from their local identities (Caddell, 2007). Also, the notion of development and the nationalism discourse in Nepalese education compromises diversities focusing on specific lives, populaces, and spaces over others (Ahearn, 2004; Caddell, 2007). Although education is also a political site where citizens are manufactured (Bryant, 2007; Caddell, 2007; Chun, 2007; Mohammad-Arif, 2007) this study cannot conclude that the textbook illustrations have led to the houses in children's drawings because of the small sample size.

Although there are no studies in Nepal regarding the drawings done by children in the context of their textbooks, studies in other contexts claim that children's drawings reflect their interests, and also their reactions in response to the researcher (Kendrik & McKay, 2012), as well as their self-expression, identity, and imagination (Hawkins, 2002). In this

study, it is not clear whether the drawings produced are a result of interests and self-expression or of their interpretation of what the researcher asked them to do, and the interview data suggests some conflict between the reality of the children's lives and the ideal of the government policy of gender equality.

The social-semiotic approach of Kress and van Leeuwen (2006) facilitates a distinction between the ideal or aspirational and the real, and this can be seen in a comparison of the cover images and children's drawings. Here, the ideal in gender equality is presented by the authorities in the covers and in illustrations in the textbooks, whereas the real can be seen represented by children in their drawings. The ideal contents by the government suggest a balanced state of life suggesting harmony as discussed above.

The use of Kress and van Leeuwen's (2006) social semiotics tells a different story about the distinction between ideal and real, in depictions of cultural identity. It appeared that the Grade 1 children were aware of the importance of gender equality. For example, through a depiction of fathers contributing to household tasks, young children understood that both males and females should contribute to household chores. Mostly this emerged through questioning, when children appeared to realise that their first answer, that their mother was responsible for domestic work, was not the one they had learned and were expected to give if questioned. Thus, findings from this study would seem to challenge the view that the larger number of images depicting women carrying out domestic chores contributes to the gendered attitudes of young children (Agha et al., 2018; Gouvias & Alexopoulos 2018; Yasin et al., 2012). Ambiguous responses from the students might indicate the gap between their awareness of the expectations of behaviours and the social reality of their experiences, that is to say, they experience the gap between the ideal and the real that Kress and Van Leeuwen use in their social semiotic analysis. However, the cause of this ambiguity is beyond the scope of this study.

No representation in this study, nor in the interviews, supports the claim that children's drawings indicate a gender-biased attitude, as found in the studies of Fung (2002) and Albers et al. (2009). However, gender bias as such was not a focus of this study.

Preference for same gender character in the images might be one of the factors influencing the participants' selection of their favourite illustration. It was found that school children like to associate themselves with their own gender in peer relations (Bukowski & Delay, 2021). Participants seem to prefer their own gender characters in their selected images and drawings, with boys being more rigid in selecting same gender images than girls. This finding supports other findings in other contexts where boys were less flexible in taking activities that were traditionally allocated as girls', thus contributing to reproducing gender binaries (Albers et al., 2009; Kostas, 2019).

Children had no difficulty in identifying male and female characters in the textbooks based on their clothes and hair length matching with the depiction of the characters on the cover images. They took these social norms as biological gender markers rather than as social constructions (Connell, 2002) thus, they also denied the possibility of exchanging clothing and hair length between the boys and girls, even though girls are depicted wearing shorts and t-shirts. Additionally, children's represented characters also adopted these hair and clothes norms in their drawings suggesting their internalisation of specific clothing and hair length as gender markers. These internalisation of stereotypical gender appearances might have been influenced by similar gender appearances in the textbooks, as textbooks research in different parts of world claim that stereotypical gender appearances normalise specific gender appearances promoting gender stereotypes (Gebregeorgis, 2016; Weitzman et al., 2003; Yang, 2016).

Although there are no studies about the stereotypical gender appearances in the current textbooks in Nepal, a gendered uniform code: skirts and shirts for the girls and pants and shirts for boys (Caddell, 2007; Joshi & Anderson, 1994) along with hair length rules specially for boys, is found in Nepalese schools. These studies also support that gendered school uniform for boys and girls makes their gender difference visible, and promotes gender stereotypes (Caddell, 2007; Joshi & Anderson, 1994). In other words, the social conventions of difference in dress, under-scored by school rules, have become equated with biological markers, making it easy to distinguish between girls and boys, thereby reinforcing gender differences (Connell 2002). As discussed in the findings in chapters 4 and 5, children's internalisation of these traits as gender markers might have been

influenced by these schools' provision of specific gender-based uniform and hairstyle rules or the broader social reality they lived. This is however a matter for further research.

6.4 Methodology and the Importance of Social Context

This study has contributed methodologically to research into gender representation in primary school textbooks by taking a social-semiotic approach (Kress & van Leeuwen, 2006) by exploring both the site of image (textbooks) and the site of audience (children) (Rose, 2016). It is one of a very few studies that use social semiotics to explore issues including gender in social contexts in textbooks (Bates, 2016; Bates, 2018; Felicia, 2019). In the context of Nepal, where textbook studies and exploration of gender is one of the least explored areas, both the focus of this study and the methodological approach are unusual. Thus, the methodological approach must be discussed alongside the findings.

Kress and van Leeuwen (2006) and Rose (2016) both centre their analysis on the visuals rather than the text, arguing that the meaning of the data is situated in the social context. Thus, the social context is significant for this study, given the major social and policy changes in Nepalese society in the years before the study was undertaken. This research argues cover images are key representative images for the overall textbook contents and indicate the intention of the publisher (Sunderland & McGlashan, 2013) that is, the Government of Nepal in this case. The exploration of the cover images indicates changes across curriculum and education policies, as well as representing social and cultural aspects of Nepalese life. This makes this study different from other studies of textbooks because, unlike most of the textbook studies, this study focusses on the textbook cover images, rather on the text.

The use of social semiotics, and the emphasis on the visual elements of the textbooks, led to the use of compositional analysis (Rose, 2016) and content analysis (Stemler, 2000), an approach which is not commonly found in other studies of textbooks. Most of the studies on textbooks have used content analysis to explore gender issues (see for example Gouviassa & Alexopolous, 2018; Kahveci, 2010; Koss, 2015; Ullah & Skelton, 2010). Since these studies look at gender issues in both language and illustrations, the number of

male and female characters, nouns, pronouns, illustrations, authors, occupations, domestic chores, indoor and outdoor spaces are quantitatively counted. A few studies have used critical discourse analysis (Ariyanto, 2018; Bhattacharya, 2017; Fadhila, 2022; Gungor & Prins, 2011; Kostas, 2019; Setyono, 2018) to explore visual and textual discourse of gender and gender power dynamics through gender representation. Within these studies some have incorporated quantitative content analysis to identify the numerical dominance of representations. Other studies have used systematic visual content analysis to explore gender stereotypes in overall images used in textbooks and narrative images (Parker et al., 2017). Some studies used critical visual analysis to explore gender stereotypes on the selected images from representational, compositional, and interactive modes of meaning (Ahour & Zaferani, 2016), while others have used qualitative visual analysis avoiding counting and looking at the characters' hair length and clothes (Yang, 2016).

There are no studies which use both compositional analysis and content analysis while exploring images, as the present study does. This makes the present study unusual as it uses compositional analysis to explore compositional difference in the textbook covers across the curriculum, publications, and children's cover image drawings. However, content analysis is also important for putting the textbook images in the policy context, and in the social context of Nepal.

This study is also unusual in including both the textbook images and students' images in relation to textbook images and their interpretation. Studies in an education context tend to focus only on the images produced by education authorities (Bates, 2016; Bates, 2018) or only on the children's response to various issues (Crawford & Hade, 2000; Unsworth & Macken-Horarik, 2015; Albers et al., 2009; Pantaleo, 2016; Taylor, 2014; Ranker, 2019). However, this study incorporates both, going beyond these existing studies; the exploration of both textbook images and children's perspectives situated in the social context make this research noteworthy in this field.

6.5 Conclusion

This study has made some important contributions to the study of gender in textbooks. It is set in Nepal, a country where there have been relatively few studies of gender in textbooks. It has shown a shift in the representation of gender over time in the cover images and illustrations in Grade 1 textbooks, leading to a more equal representation of women in paid work and men engaged in domestic chores, and can situate this shift in the social context of the change to the Nepalese constitution and the need for educational reform. The analysis of the textbook images also revealed a representation of an idealised Nepalese culture, with a focus on iconic landscape and architecture.

Although the literature suggests that different ethnic groups may hold differing views of the place of women in society, no such differences were found in this study among the children who attend the private schools used in these case studies and therefore the views they hold may be better identified by economic status rather than by ethnic or caste background. However, it was clear that the Grade 1 children were aware that their own experiences of who carried out domestic chores might not match the expected, ideal situation.

The literature suggests children from various cultural contexts exhibit same gender preferences while choosing their peer groups, however, this study extends this finding in children's selection of images as well. The children's gender identification seems influenced from the specific gender appearances of the characters in textbooks imposing stereotypical gendered hair and clothing norms as suggested by other studies.

Methodologically this study is significant in the use of a social semiotic approach to explore both the ideal social representations depicted on cover images and the children's images that are closer to the day-to-day realities. Moreover, the combination of multiple methods in data collection adds to the strength of this study despite the limited number of participants. Additionally, the theoretical lens used in this study sets this study apart as gender theory used in this study is linked with policy documents, constitutional change of Nepal, and other human right documents. This has contributed to link the Nepalese gender background in the education documents to recent progress in the national and international policies regarding gender equality.

7. Conclusion

7.1 Introduction

This research investigated the gender roles, relations, and activities depicted in the cover images of Grade 1 textbooks across the curriculum along with the students' drawings, selected images and responses gathered in short interviews. The purpose of this research was to explore the changes in representation of gender roles in textbooks in relation to the new education and social policies in Nepal because of the major political and social changes that have occurred recently. The findings revealed that the new government-published textbooks were more likely to present gender parity in the illustrations than the previous curriculum textbooks, or the government-endorsed textbooks. The children's images, both those they selected and those they drew, reflected social gender influences and the impact of their textbook images. This chapter concludes this study by highlighting its four major sections: the answers to the research questions, the study's contribution to the literature, its implications for practice, and suggestions for further research.

7.2 Answers to the Research Questions

This study posed three research questions. The first research question focussed on an exploration of the differences between the previous curriculum textbook covers for Grade 1 students, and the new government produced curriculum textbook covers in terms of the changes seen in gender roles, relations, and activities. The comparative findings regarding the textbook covers across the curriculum suggested that the new textbook covers were more appealing to the audience through their design and use of Nepalese lifestyle and context in the images. In particular, the use of colour printing in a single composite image contrasts with the multiple monochrome sketches of the previous covers. This is important because it shows how the change in production technology changes the image meanings (Rose, 2016).

Change in the social political context can bring change in the gender order (Connell, 2002). The impact of the new educational social policies in relation to the current constitution can be seen in the new textbook covers which present a balanced depiction of gender roles, relations, and activities. The new textbook covers even present counter-stereotypical images challenging the traditional gender attitudes regarding household chores and outdoor activities. The analysis of the illustrations throughout the four new textbooks demonstrated that there were gender progressive images depicting both males and females in the traditionally gender-specific activities such as household chores, ball games, children's activities, and in outdoor/indoor spaces. However, females were still dominant in cooking, washing clothes, and activities like dancing in contrast to males who were portrayed playing musical instruments and ball games, as well as interacting in outdoor spaces. Gender-specific hair and clothing were maintained in the majority of images, making it easy to tell girls from boys and women from men. The gendered content in the illustrations was found more frequently in the Social Studies and Nepali language textbooks, subjects which are concerned with Nepalese social and cultural life. The English and Mathematics textbooks did not draw on the Nepalese context and thus could avoid these contextual images.

The second research questions probed Grade 1 students' gender attitudes through their own drawings, followed by short interviews. It was found that instead of the textbooks published by the government, the schools were using the textbooks endorsed by the government and produced by different publishers. Therefore, the participants chose their favourite activity images from the textbooks used in their school. The cover images drawn by children were influenced by the covers of these government-endorsed textbooks. Their cover image drawings revealed social gender influence on participants as they associated cooking and laundry activities with female characters although further probing indicated that they were aware that males should also do these domestic tasks. Nepalese contextual representations were seen in the drawings of houses, flags, flowers and trees around the houses, pumpkins on the roof top, and so on. These details were not influenced by their ethnic and regional backgrounds but appeared to come from the generic details in the cover images of the textbooks the children were familiar with.

The third research question complemented the second question by probing gender representations in children's favourite activity images. The results indicated gender disparity in the occupations, activities, and outdoor/indoor activities chosen. The male participants' images included activities related to occupations and outdoor settings whereas the images chosen by female participants did not include any occupational activity, but represented household chores, and indoor settings.

To put the children's selected images in the context of the textbooks they were familiar with, the content analysis of the government endorsed textbooks covers and illustrations showed that the three textbooks with human characters on the covers completely excluded females and the other cover only depicted flowers and trees. In the textbook illustrations, females were underrepresented in occupational roles, and presented only in a limited range of occupations. The comparison with representations in the government published textbooks showed that these government published textbooks were more balanced in representation as there was a smaller gender gap in occupations, outdoor/indoor setting, and domestic activities than the books endorsed by the government and published by commercial companies. Overall, the government endorsed textbooks demonstrated greater gender disparity in household chores than the textbooks published by the government. The depiction of household chores indicated the social norms of Nepalese social context, with females dominant in activities such as cooking, washing clothes, and washing utensils.

One of the surprising findings from the participants' drawings was regarding the similarities of the image content. Although the participants came from distinct diverse ethnic, cultural and regional areas, leading to an anticipation of variation in the data, their drawings indicated uniformity, with similarities to the textbook image contents that predominantly presented generic illustrations rather than cultural images.

Gender roles differ in different social contexts (Connell, 2002), thus some of the findings in this study were more apparent to an insider researcher. There was no gendered use of colour in the textbook images nor in the drawings produced by the children, unlike the

popular western concept regarding gendered colour preferences; this is because no gendered colour discriminations exist in the Nepalese cultural contexts. Further, some of the children's play activities, such as *gatta*, kite flying, rolling a tyre, playing *madal*, *dhyakka*, are recognisable to the insider as traditionally gendered activities, which may not be the case in other cultural contexts.

Thus, it can be concluded that the new textbooks published by the government representing the new curriculum incorporate the social changes from the 2015 Constitution and related government policies, presenting gender equality in the covers and illustrations of the Grade 1 textbooks. To some extent, these images may be seen as an idealised representation of Nepalese culture, contrasting somewhat with the reality of life presented by the drawings of the children.

7.3 Contributions to the Literature

This study has made some significant contributions to the field of scholarship. First this study fills an empirical gap in textbook studies in Nepal, as Nepal lacks studies in gender in the context of the textbooks used in schools. Secondly, this study relates the textbooks and their content to the current national policies and context of education. In doing so, this study brings together the gender equity policy of the department of education with the school textbooks across the curriculum published by the government and those endorsed by the department and published by commercial publishers and used in various private schools in Nepal. As this study incorporates the set of textbooks belonging to two curricula and produced by various publishers, it presents a comparative analysis between these textbooks in terms of gender representation and their audience appeals.

The third important contribution of this study is a methodological one, in including the Grade 1 children as the audience for the textbooks, something which is relatively uncommon in studies of textbooks. There are relatively few studies that incorporate young children in the research in relation to textbooks. Thus, this study adds to the scholarship of the studies that value the young students' perspectives on the gender attitudes through selected images, drawings, and short interviews.

The fourth significant aspect of this study, and another methodological one, is in the use of the children's own drawings of textbook covers and their choice of activity images as an important set of data. It is very rare for children's representations of desired textbook covers to be included as part of a study to explore their understanding of gender.

Fifth, this study also makes contributions to the field through its research approach, in particular by using Rose's (2016) approach to visual methodologies and the use of social semiotics (Kress & van Leeuwen, 2006) to explore gender. The emphasis on images and their analysis and interpretation, along with multiple sources of data, multiple data collection methods, and multiple approaches to analysis have contributed to making this study unusual among studies of textbooks and their representation of gender. In particular, the use of social semiotics to explore gender meanings in textbooks in the Nepalese context adds to the scholarship in the field of methodology that can be used in other contexts.

Sixth, the study contributes to our understanding of various phenomena that are unique from the popular western context. For example, use of colours in Nepalese context reminds us that the significance of colour is a cultural phenomenon as there were no gendered colour associations in the images in textbooks nor in children's images. Also, it highlights that gender roles and activities differ according to the social contexts as specific household chores and activities that were gendered in Nepalese contexts may not be the same in other contexts. Similarly, from an insider researcher's perspective, it is clear that some activities that are presented as gendered, such as playing *madal* and flying kites, are cultural activities where particular roles carry cultural responsibilities.

Finally, the study provides data that can act as a benchmark for future research into Grade 1 textbooks and the perceptions of gender of their audience of Grade 1 students, even though some aspects of the data are limited. The methodology from this study can be used in future studies to compare textbooks from other years of schools and students. These final contributions could be significant for the development of research in this field in Nepal.

7.4 Implications of the Study

This study has various practical implications in the education context for teachers, illustrators, policy makers, and other researchers.

For teachers at all levels, this study focusses on the school context and shows an aspect of the relationships between national policy and the textbooks used in specific school contexts. It clarifies that the change in national policies brings change in the content of textbooks through its comparative analysis of the covers across the curriculum in Grade 1. By presenting textbook illustrations as powerful meaning makers and important pedagogical tools, the study hints that teachers can play a significant role in providing critical interventions in generating discussion on some of the images suggesting gender-based stereotypes.

This study emphasises the role of illustrators as an important part of textbook design and production and can give them a sense of responsibility. Although there are guidelines from the government to create gender responsive teaching and learning resources, there has still been a lack of gender awareness in professionals involved in textbook production (Bhattraï, 2020). For the illustrators, this study provides an insight that illustrations in textbooks are a powerful communicator of meanings as suggested in the literature and they have a potential impact on the audiences. This research highlights that, like the written contents of textbooks, textbooks illustrations are important when it comes to the junior levels of schooling when students learn more by the illustrations than by words. Thus, this research emphasises the important role of illustrators in textbook production and indicates the importance of training and awareness about gender issues for illustrators engaged to work on the textbooks designed for the new curricula.

This study has implication for policymakers in the Department of Education in Nepal. The study shows that the children's choice of images replicates the representations reinforcing the gendered ideas prevalent in the society, at the same time as it highlights how textbook content are contributing to the gender and societal change through their

contents. This study demonstrated the gender progressive aspects of the newly published government textbooks and some of the aspects that are still in need of improvements for gender parity that can be useful for the policy makers. The findings regarding the differences between textbooks published by the government and those endorsed by the government but developed and published by commercial publishers are also important for policy making. This study suggests that stronger policies have impacts on the textbooks and their representation of gender. It also suggests that there are places to improve gender representation coming from the cultural backgrounds that presents male and female in specific activities. Additionally, this study also unearths that the images representing cultural diversity were less, and hence more images representing cultural diversity could connect the diverse communities into the mainstream education.

Lastly, this study can provide useful insights for both the government and commercial publishers considering the gender representation of their textbook contents from the audience perspective. The findings from this study suggests that there are still gender disparities in certain aspects like occupations, household chores and some traditional gender specific activities that need to be acknowledged. The publishers can be more aware of the gender patterns in future publications so that greater gender balance appears in cover images and illustrations in future.

7.5 Suggestions for Further Research

The findings of this study lead to some significant suggestions for the further research in the field of textbooks and education in Nepal. These suggestions can be seen as the beginnings of a research agenda in this under-researched area. These suggestions come from the lack of studies in the gender and textbook contexts, those involving other users and publishing authorities of textbooks, those from a gender intersectional perspective, and those incorporating participants from remote locations unlike the current study.

The first important suggestion can be seen as a call for further research in Nepal in the field of gender representation in textbooks at other school levels. There are many studies on textbooks around the world; however, Nepal lacks such studies. Therefore, an

extensive study of the newly published textbooks for other school levels can bring forward the discussion on the gender representative aspects of the textbook contents and initiate the change in content from gender perspectives.

Government publications have recently introduced new textbooks in 2021 and 2022 for other school levels that are still unexplored, alongside the Grade 1 textbooks that are the focus of this study. These textbooks can be explored from the gender perspective to identify how gender is represented in the textbooks belonging to other school levels. The findings from these future studies could be compared with findings from other countries where studies revealed that there was difference in gender representation in the textbooks belonging to lower school levels and higher school levels. Thus, exploring textbooks from the other school levels could identify whether the gender representation is maintained evenly in other levels or there are variations.

Another significant area for future study can relate to the textbooks that are endorsed by the government and published by commercial publishers. Government endorsed textbooks are used in private schools across the country; thus, it is important not to ignore them, but to explore them from the gender perspective. In this study, there were clear differences between government produced textbooks and those endorsed by the government. Findings indicated that the government endorsed textbooks from commercial publishers had greater gender disparity and more cultural images than the government published textbooks both in the cover images and in illustrations inside the textbooks. Thus, there is scope for an in-depth study in the overall gender patterns represented in the government endorsed published textbooks in Nepal.

Similarly, exploring teachers' ways of using the textbook contents in classroom can be a significant area of study, to explore the ways in which notions of gender are reinforced or discussed critically. This study could not involve teachers as textbook users; however, teachers are also significant textbook users whose pedagogical practices impact meanings of the textbooks' contents while teaching the lesson in the classroom. Thus, studies involving teachers as textbook users could be conducted in both government and private schools in various locations in Nepal as there are not many studies in this field. Such

studies involving schoolteachers and their use of textbooks in the classroom from a gender perspective can add to our understanding of gender parity because it is important to know how the teachers approach the textbook content in classrooms.

Likewise, studies regarding gender in textbooks from an intersectional perspective would bring interesting results as these studies can explore gender representations coming from the various cultures, religions, and ethnicities in Nepal. In the present study, it was found that the focus of textbooks was on the dominant culture rather than on the cultural diversities. However, a detailed study from the gender intersection perspective can help to understand how various gender intersections are represented in the textbooks. In a multiethnic, multicultural, and multilingual country like Nepal, this could be an important research area to ensure gender inclusivity from various backgrounds. The diversity of the people of Nepal could add to our understandings of the representations of gender, especially in cultural practices represented in or omitted from textbooks.

Textbook production is a complex process involving people from various positions such as policy makers, content writers, illustrators, and publishers often working independently. The view of these individuals regarding gender inclusion in the textbooks can provide an important insight regarding gender representation in textbooks. As there are no studies involving these people responsible for textbook production in Nepal, such a study could make a significant contribution to this research agenda for the field of gender and textbooks in Nepal. Existing studies point to the dominant presence of males as textbook writers, and as a potential cause for female underrepresentation in textbooks content. Thus, there is scope for research probing these significant members of textbook production teams regarding their view on the representation of gender in textbook contents, as well as the ways their own gender and social background might impact gender representations in textbooks.

As well as illustrations, language is also an important aspect of textbooks where gender is reflected. Future studies can focus on how gender is reflected in the language use of the textbooks. The previous study in Nepalese textbooks published by the government for Grades 4 and 5 found that there was a mismatch between the illustration and the language

contents. It is possible that gender representation in the language may produce different results. Thus, this could be another area of study for researchers in the future.

It would be interesting to use the methodology and methods from this research in similar studies in other contexts to see the results. There are two aspects here. The first is the use of comparative case studies, involving participants from private schools or public schools from various locations and other school levels. Also, this study involved schools in locations that were relatively developed in terms of infrastructure and facilities; future study involving students from remote locations could bring variation in the data, and potentially fresh insights as people from remote locations may be relatively less influenced by the modern, potentially Westernised, lifestyle and closer to local contexts. Thus, there is scope for similar studies in remote locations to add to our understanding of representations of gender parity.

Lastly, this study's use of visual methodologies and social semiotics provided a wide range of data and insights on gender and its positioning in society. This study makes it clear that visual methodologies are effective approaches to probe gender in any social context. In fact, visual methodologies and social semiotics give space to the social context and social meanings of the images and text being studied. These are among the least used approaches in exploring gender representation in textbooks and could provide approaches to data and its analysis that bring an innovative perspective to the field as they provide an inherent link between the textbooks and their design and production, the content, and the audience, as well as with the societal context of education.

7.6 Conclusion

This study is the work of an insider, a woman born and raised in Nepal and with extensive experience working as a private school teacher, but who is also an outsider using western research methods, an inquisitive researcher, walking the path of an investigation bringing new approaches and new insights to the important question of gender representation in textbooks. These two perspectives enabled this research on gender and its representation in the covers and illustrations of Grade 1 textbooks

combined with interviews and drawings from Grade 1 children that is unusual in its level of insight and in its methodological approach.

The research showed the impact of the changed national policies on the newly published textbooks in Nepal, and at the same time it revealed that there are still representations that are guided by the cultural norms reinforcing gendered attitudes in these textbooks. It also showed that the government endorsed, and commercially published textbooks used in private schools have illustrations that seem more gendered than the textbooks published by the government. The textbook covers drawn by the children showed the tension between the ideal of the government policies on gender parity and the reality of the lives of the children, although their response to question prompts indicated that they were probably aware of the ideal.

This study has practical implications for teachers, publishers, illustrators, researchers, and other stakeholders in education, especially policymakers. Finally, the study has raised a number of questions for further research, which have been presented as a research agenda that could be undertaken on a national level in Nepal. The representation of gender in textbooks, through cover design and illustrations, and the understanding of gender in the diversity of Nepalese cultures and ethnicities poses many unanswered questions, leading the way for further research opportunities.

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Appendix

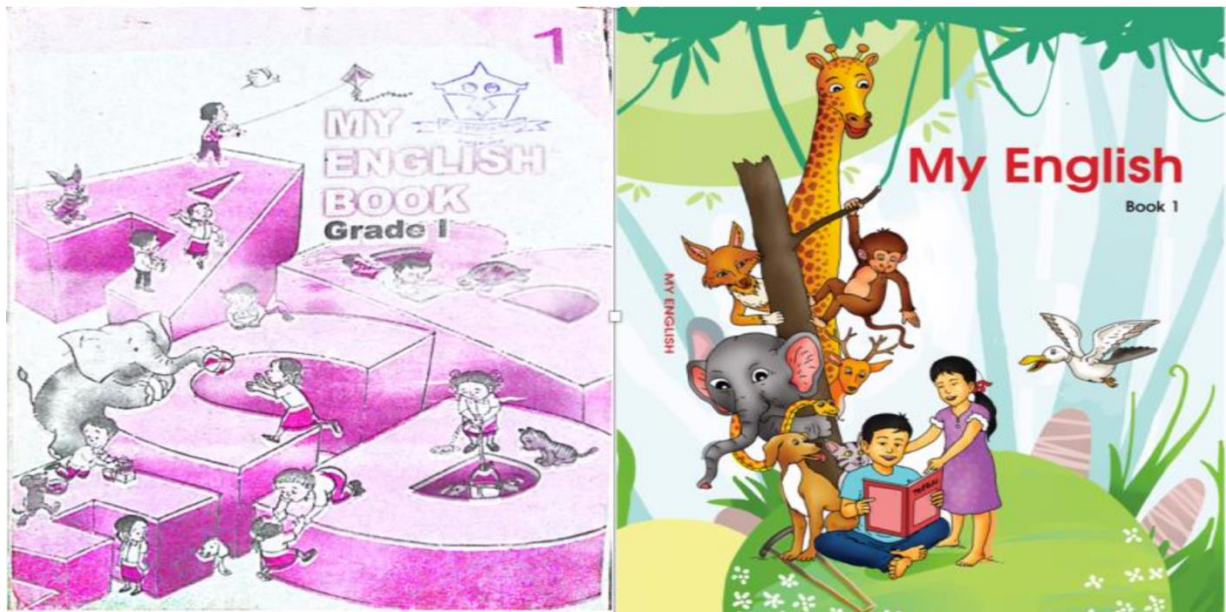
Comparison of Old and New Textbook Covers



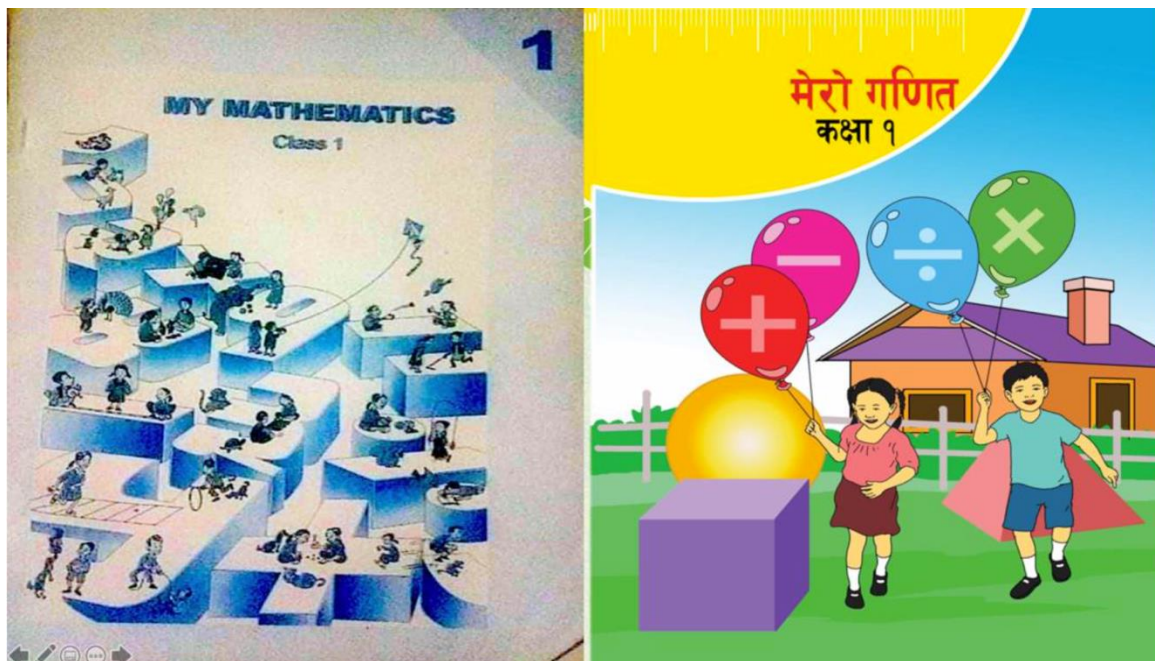
Old Nepali language textbook cover (on left) and new Nepali language textbook cover (on right)



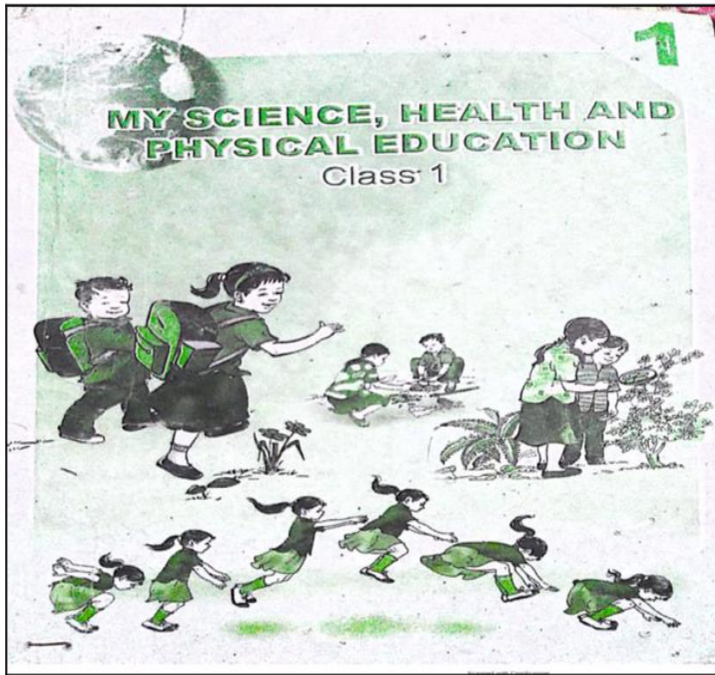
Old Social Studies textbook cover (on left) and new Social Studies textbook cover (on right)



Old English language textbook cover (on left) and new English language textbook cover (on right)



Old Mathematics textbook cover (on left) and new Mathematics textbook cover (on right)



Old Science textbook cover (Science textbook is compiled in the Social Studies in new curriculum)