

The Power Of Images In The School Textbooks: Analyzing The Impact Of Textbooks Images On The Minds And Learning Of Students

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Abstract

Images are an important source of information and play a vital role in presenting meaning and significance of the related themes and intentions. Impact of images becomes more effective if these are linked with the text presented in the book. The present study is undertaken to note the impact of primary class textbooks images on the minds and learning of students. For this study, sample was selected from Urdu and English Books of Primary classes (grade-I to Grade-V). Content analysis is adopted as the tool for implementation of the research in which contents related to the nature and purpose of this study were studied and analyzed. The results of the study denote that the images presented in the textbooks are fully loaded with different messages and contents that are related with children development and many other aspects of their life. These contents are based on the values of a particular society or area and usually convey a deeper message. It was found that in most cases the Islamic values are presented only as the national values, while some of the images also portray gender as well as class differences of society. The dress code of upper class is presented as dominant dress code, while the minorities are not presented well/positively.

Keywords: Textbooks, Images, Content Analysis, Learning, Discourse.

Introduction

In general terms textbook is an instruction handbook or a standard work in a particular field of study. Unlike some books that are just created and published for educational purposes, textbooks have understandable purpose and descriptions of their creation. Although, textbooks are created and published for numerous purposes, however; mostly textbooks are produced to meet the needs of educational institutions. Thus, textbooks are amongst the larger category of educational materials and contents and specifically fall in the print media of

educational instructions. In current context, textbooks includes all those materials that student use i.e. workbooks, textbooks, educator and learner manuals, atlases, glossaries, magazines, newspapers, graphs, and posters are included in the printed media (Mahlaba, 2006; Swanepoel, 2010).

The design and shape of a textbook is vital learning process and if a textbook is well prepared in terms of its internal and external structures and visual design, it can be one of the best sources and be considered an effective

instrument for teaching and learning processes (Aslan & Polat, 2008). Part of our experience is represented by images and photos. Often, these photos don't show the entire, but they might focus pupils' attention on significant life situations (Dimopoulos, Koulaidis, & Sklaveniti, 2003). Pictures have the power to persuade students to read the accompanying text; they can focus their attention or encourage more thorough processing of the textual information contained in illustrations. The different pictures can also clarify and explain difficult-to-understand material and help create nonverbal codes in addition to verbal ones, increasing the likelihood that the picture text content will be remembered for a long time (Peeck, 1993). Through the use of images, students can bring prior knowledge to life by, for example, imagining what will happen in the future or in a far-off place, or by recalling earlier events (Cho & Kim, 1999). Importantly, the presentation of different images also play an important role in constructing self-image, their class and status in relation to others in society.

A careful study and observation of the different contents of the textbooks of primary schools reflect that these contents help in familiarizing students with different objects and situations that they are expected to encounter in future. After a rigorous, and objective categorization of primary schools textbooks contents enable us to obtain results that are essentially associated to these images. The systematic analysis of textbooks images has two connotations: 1) every piece of presented image (s) has a power and conveys deeper information relevant to the issue. 2) It also indicates that images have a hidden intent and purpose and not presented for mere attraction. 3) It impact the minds and learning of students at large as students place themselves and play role in accordance to the message learnt from these images (Brierley and Cowton, 2000; Auster, 1956). Textbooks are easily accessible and

available source of knowledge that excite motivation among students and enhance teaching-learning process. This study was thus, undertaken to identify the power of images in textbooks in constructing social identities and self-image among students and to know that how textbooks images are used as strong tools in shaping students' minds and learning process at large.

Literature Review

It is generally said that a picture is worth thousand words, and in textbooks its significance further increases. In order to motivate and attract students, to strengthen learning and produce a lasting impact images used in school textbooks as a source of information and knowledge. Images that are meaningful and related to text illustrate a deeper meaning and make the text easy in understanding (Gabriel, & Gabriel, 2010). Koch, (2001) in his study "the power of images in shaping our view towards world" explained that images play an important role in shaping our opinion about the social world surrounding us. It is a source of vital information and presentation of images is of immense significance in teaching-learning process (Koch, 2010). Images are powerful tools in social transformation, developing our self-identity and familiarizing us with the cultural context in which we live and establish a relationship with the given text (Taras, 2012).

Dimopoulos et al. (2003) in their study on the titled "Towards an Analysis of Visual Images in School Science Textbooks and Press Articles about Science and Technology" found that images play an important role in pedagogical learning. By combining pedagogical and socio-semiotic perspectives, the analysis is conducted using the dimensions of content specialization (classification) and social-pedagogic relationships (framing) supported by the images as well as the elaboration and abstraction of the corresponding visual code (formality). The grid is

used to analyze 2819 visual pictures taken from science textbooks for students and an additional 1630 visual images taken from the press. The findings indicate that, when compared to press material, science textbooks: a) use ten times as many images; b) use more images to familiarize their readers with the specialized techno-scientific content and codes; and c) tend to increase their readers' feelings of empowerment by using the visual mode. Furthermore, the specialization of the material projected by the visual images and the development and abstraction of the associated visual code both coincide with the educational level of the school scientific textbooks (i.e., from primary to lower secondary level). The aforementioned findings have consequences for the guidelines for the efficient use of visual content as students' educational levels rise as well as for the efficient integration of visual pictures from press content into science classrooms.

Kasmaienezhadfar et al. (2015) researched on "Effects of Pictures in Textbooks on Students' Creativity". The study found that the textbook, which gives teachers and students a clear structure, is one crucial component of the curriculum. They further claimed that textbooks are a rich source of learning and increase students' creativity if these are well designed and images are used appropriately. This work is often quoted as seminal to demonstrate the value of textbooks and the impact that images in textbooks have on students' creativity. The learning process is influenced by the pictures in the textbooks and before reading a text, students frequently view visuals, and these images might help them use their imaginations more effectively. Images are the core of pedagogical activities and the results of this study demonstrate that textbook illustrations can foster students' inventiveness. The use of images for educational purposes and learning is essential, but textbook designers must understand the value of an image. This study aims

to assist curriculum planners and designers by identifying textbook strengths that should be emphasized and weaknesses that should be avoided and addressed moving forward.

Bridsell et al. (2017) studied "The role of images in ELT (English Language Teaching) textbooks: A case for visual metaphors". Although the value of using visual aids in foreign language instruction is widely recognized, and it has been a rich method used in language textbooks. In learning foreign language images are related to the text and are used to enhance learning opportunities easily. Research suggests that there is a need to discover new pedagogically useful ways to use images and the use of visual metaphors is one area has been recognized as a potential means for achieving this. Metaphors are a crucial component of both spoken and written language, as well as other representational forms like pictures (Lakoff & Johnson, 1980). This study first discusses earlier studies into multimodal and visual metaphors and then using these kinds of visual metaphors to language acquisition. It was found that the use of visual metaphor gives students the chance to explore societal concerns while also developing their critical and creative thinking abilities. In conclusion, I offer a paradigm that describes how to comprehend visual metaphors using both creative and critical thinking.

Nur'graha & Hermawan (2020) studied on "What Do the Pictures Say in a Science Textbook?". The study looked at how numerous studies have shown that visuals are crucial for teaching abstract science concepts and thus assist students in understanding complicated scientific ideas. In these books the images convey the ideational meaning of text and explain their conceptual significance. The research focuses on identifying the types of images and types of processes employed in the images to discover the ideational meaning using multimodal analysis. The first six chapters of chemistry textbook

served as the source of the information for this study. The textbook's visual and verbal modes were examined using the notion of reading images (Kress & Van Leeuwen, 2006) and Systemic Functional Grammar (Halliday, 1994). The analysis's findings indicate that ideationally, in terms of picture types, the textbook predominately used realistic images, those that portray reality from a human perspective. Analytical imagery predominated in the textbook's usage of process types. Ideationally, the textbook's visual and verbal modes support one another to better convey to students the meaning of the scientific idea and taught them science subjects in a better way as different semiotic models are used to make meaning and communicate functions through different captions and images in a simple and easy manner (Nur'graha, & Hermawan, 2020).

Mushtaq et al. (2022) did a study on "Analyzing Visual Images of English Language Textbook: A Multimodal Discourse Analysis of Textbooks in Pakistan". The study found that both a very favorable and neutral picture of gender and religion had been adopted. Although a lack of graphics can be sensed, adding more pictures will increase the textbook's interactivity and benefit the students since some points need to be further illustrated through pictures for a better understanding of the narrative or text. Additionally, because the majority of the images are drawn and have an animated appearance, adding authentic images from the community would increase interactivity and make students feel more at ease and familiar with the textbook. For example, uniform and school images from actual public schools would have a profound psychological impact on students. In order to acquire a vivid and accurate portrayal, it is also proposed that the quality of the illustrations in terms of drawing, colors, and paper of textbooks needs to be increased.

There are several advantages to content analysis in research (Kolbe and Burnett, 1991). First, it enables discrete communication evaluation. This tactfulness is especially useful in circumstances when direct techniques of inquiry might provide skewed results. In addition to the effects (cognitive, affective, and behavioral) on different types of message content on receiver responses, it can also evaluate the effects of source characteristics (attractiveness, credibility, and likability) and environmental variables (e.g. regulatory, economic, and cultural) on message content. Thirdly, it offers an empirical starting point for developing fresh data on the character and impact of certain communications. Content analysis also has the potential to be used in conjunction with other research methods in multi-method studies. Diverse techniques are used in multi-method research to reduce method biases and improve the validity of findings.

Purely descriptive content analysis objectives allow for the detection of patterns and frequency of occurrences (Carlson, 2008). Instead of focusing on the communicator or the audience, content analysis studies the message itself (Kassarjian, 1977). Most of the research Kassarjian cites focuses on using content analysis to examine cross-sectional changes or patterns across time that are thought to be influenced by the environment (Holbrook, 1977). The activity makes use of content analysis, a technique for gathering and examining qualitative data with a systematic coding system (Berg, 2001). An artifact of social communication's "manifest content" refers to components that are visibly visible and can be tallied precisely (Taylor, 2003). Contrarily, latent content necessitates an interpretive reading by the researcher who probes the data's symbolic meaning in order to find its profound structural meaning (Berg, 2001).

For the purpose of contextual interpretation of documents produced by the communication process, content analysis is a

research method that can be applied widely and heterogeneously. It can be performed manually or with computer assistance, and it is anticipated to produce a reliable and valid conclusion. In content analysis, there are five distinct categories of texts: 1) Written text, which includes books and papers; 2) Oral text, which includes speeches and theatrical performances; 3) Iconic text, which includes pictures and symbols; 4) Audio-visual text, which includes TV shows, movies, and videos; and 5) Hypertexts, which are texts discovered on the Internet. Studying traces—documents from the past—and artifacts—nonlinguistic documents—are other ways to define content analysis.

Statement of the Problem

Images are powerful means of information and play a significant role in creating relationship with a text. The presentation of different images is also helpful for the maximum learning output when both the imaginary world and text is present before a student. Textbook images are not plain descriptions and these are designed for conveying a hidden meaning and content that have great impact on students. The creation, presentation and usage of images can have a positive impact on the minds and learning of students, however; it also imprint negativity on their minds. The present study was based on content analysis to highlight the broader aspects of presentation and usage of textbooks images and its significance; however the study particularly focused on the power of textbooks images and its impact on students' minds and learning.

Research Objectives

- To find out the presentation and power of images in school textbooks at primary level.
- To analyze the impact of primary class textbooks images on students minds and learning.

Research Questions

- How different images are created and presented in schools textbooks?
- How images in school textbooks impact the minds and learning of students?

Research Methodology

Methodology is an overall umbrella used in a research and it is the understanding of the complete research process (Neuman, 2011). It is plan and a particular technique utilized to approach the data and techniques of data analysis under qualitative and quantitative approaches. Content analysis is a widely used approach in different disciplines including literature, history, journalism, political science, education, psychology, and others use content analysis. This research also used content analysis as it was an appropriate method of investigating the problem under study. Content analysis is used for identifying the meanings within text, writing, visuals, or speech, books, newspaper or magazine articles, commercials, speeches, official papers, movies or videotapes, song lyrics, pictures, clothes, websites, or artistic creations fall under this category (Neuendorf, 2002, p. 10).

During the content analysis stage of information processing, communications content is turned into data that can be compared and summarized by applying categorization rules objectively and systematically (Paisley, 1969, p. 133). According to Budd, Thorpe, & Donohew (1967, p. 2), content analysis is a method for watching and studying the overt communication behavior of chosen communicators. It is a systematic technique for analyzing message content and handling. While content analysis is undoubtedly an analytical technique, it goes beyond that. It is an observational technique. Instead of directly witnessing people's behavior, having them fill out questionnaires, or conducting interviews, the investigator looks at the communications that people have created and

examines the communication (Kerlinger, 1964, p. 544).

In this study, contents of Urdu and English books and different images presented therein were studied, observed and categorized to derive findings and conclusion. In total five (05) Urdu textbooks (from class-I, Class-V) and five (05) English textbooks (from Class-I, Class-IV) were taken as a sample for this study. The different images are its relevance with the text was also studied to know about the power of these images on students learning outcomes. It was also focused that how these textbooks images negatively impact students' minds and learning. .

Data Analysis

After careful and systematic analysis of the contents/images presented in textbooks the data was analyzed. Before analysis, the data was categorized for identifying different areas for discussion and presentation. The different related themes were coded and collated together to avoid repetition in analysis and to cover maximum aspects. The data was analyzed considering the critical discourse analysis model in social sciences. For clarification of the study question and for deriving findings and conclusion the study was presented in the tables below.

Table No. 1

S. No	Class One	Lesson	Urdu	Page No	Content/Images	Remarks
1	Class One	Mai Kya Phenu	Urdu	142	National Dresses	While we see in all the picture boy are wearing pant and shirts. These pictures also convey the message that our institutional dressing is also paint shirt etc.
2	Class One	Hamara Dais (11)	Urdu	134	Kya ap Jante hain?	The map of Pakistan including Gilgit Baltistan and Kashmir is showed but the clothes are presented as pants and shirts.
3	Class One	Pronouns	English	17	Boys Playing with the football.	Boys are playing with the football, while girls are given no role. This shows the gender bias in textbooks.
4	Class One	A Greeting Card (Unit 9)	English	86 to 90	Eid Card with Eid Mubarak	No examples of minorities are quoted so it can be observed that the Muslim biased attitude is presented.

5	Class One	An Oral Communication	English	76	Pant Shirt, Suit	Here the pant and shirt is described as the national dress of Pakistan, while ignoring the provincial and regional dress. This reflects the dominant dress code of the upper class.
6	Class One	Games	Urdu	56	A Boy with Football	Boys are presented playing with football; however females are presented with tennis ball and other delicate games .In some cases they are portrayed as spectators watching boys in the playgrounds.
7	Class One	Mera School	Urdu	103	Boys Playing with the football,	Boys playing with the football. It reinforces gender differences. This portrayal also indicates that textbooks are used as a source of constructing gender and reinforcing the dominant patriarchal ideology.
8	Class One	Jaiza	Urdu	118	children are playing in the ground	Again, boys are with the football. There is no mention of girls play. This show how school textbooks present boys and girls and define their gender roles. It reproduce gender inequality in society and construction of self-image
9	Class 2nd	My home City	English	12	Boy with the flag	Here the people are told the significance of national dress but many people in the image are in pants.
10	Class 2nd	Sport Days	English	67	Boys playing with the football,	This shows significance of playing is denoted.

11	Class 3rd	I like to play	English	68	Boys playing with the football,	Significance of playing is denoted. It is associated with masculinity and presented as boys' field.
12	Class 3rd	Sports and games	English	70	Many Game and sports mentioned by Hockey which is our national game is excluded	It makes the sense of Significance of playing but hockey is abandoned and this denotes the difficulty of the hockey playing.
13	Class 3rd	My Culture My Pride	English	93	National Dresses	While we see in all the picture here again the pants are presented as the national dress.
14	Class 3rd	My Culture My Pride	English	94	Religious Festival, positive point to show diversity in our country	It is also based on the ethical development and awareness of religious events. However; it is primarily focused on Islamic values and teaching.

Table No. 2

S. No	Class	Lesson	Book	Page No.	Content/Images	Remark
1	5th	Patience	English	2	With the Example of Hazarat Muhammad	This lesson shows that students shall read all the contents. After reading they shall decide if they have some other role model or not. Although, it is good to teach lessons related to the Holy prophet, however; it is not a requirement of creating a pluralistic society.
2	5th	Patience	English	3	Who is your role model and why discuss	Again this was reflected in the school books. The Islamic values are inculcated through school textbooks. Instead it

						would have better if some images related to co-existence and religious harmony have been presented as it was prevalent at the time of Holy Prophet.
3	5th	Patience	English	4	Assalam-u-Alaikum, wa Alaikum Asalaam	This seems to show we are having a Muslim cultural. However; these books are constantly eroding the very soul and purpose of muslim culture and make students addicted to foreign culture.
4	5th	Patience	English	7	Proper noun (Holy Quran)	It denotes the only Islamic values. There would have been a mention of other Holy Books as well.
5	5th	Be Grateful (Allah Loves Me)	English	14	Allah Subhan O Talah	This is constructed from an Islamic point of view, but those students who are unable to read in Arabic will face problems. It is also challenging for students belonging to minorities and studying in general public or private schools. What about those who can't pronounce.
6	5th	Women as Role Model	English	26 to 27	Fatima Jinnah Due To her untiring effort and Dr. Routh Fau Due to her effort	Here I felt some formality to introduce Dr Routh while for Fatima Jinnah is presented in a more respectable manner. This also perfectly negates the proper role of a female as Fatima Jinnah is presented as helper and assistant to Muhammad Ali Jinnah in freedom movement. Her

						individual role is not presented at all.
7	5th	A Fit and Healthy Life	English	57	Allah Subhan O Talah Bless Your teeth,Insha'Allah	Seems to show we are having a Muslim cultural.
8	5th	Review -2	English	64	I looked At the Sky and asked Allah Subhan O tala for Help	This also indicate that we are having a Muslim culture and values.
9	5th	Do What Right	English	76	We should Thank Allah Subhan O Tala all the time	In this lesson and image mostly Islamic practices are presented and other religions are neglected.
10	5th	Do What Right	English	77	He not only thanked to Allah Subhan O Tala but Also Praised Raffey, and Thanked to Allah Subhan O Tala to show Him Right Path	Here are also Islamic religious practice are portrayed. It is ignored that other religions equally have its own standards of right and wrong and morality.
11	5th	Fill in The Blanks	English	80	Allah Subhan o tala	Here are also religious practices.
12	5th	Patriotism (Read and Practice the given dialogue)	English	87	Assalaamu Alaikum, wa Alaikum Asalaam	Here patriotism is shown as a religious obligation. Students have to solemnly dedicate themselves to the country as a religious practice.
13	5th	Eid-Ul-Azha	English	96 to 106	the entire chapter is belonging to Muslim religion	Here the significance of Islamic values is denoted.
14	5th	Let's Be Helpful	English	112	And Save Money Inshallah	Here the message is clear and it has been shown that saved money shall be spent on other. He the other gesture is denoted is of capitalism that we could purchase many

						valuable goods on the saved money.
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Conclusion

This study was primarily focusing on the power of images in school textbooks. The study was based on content analysis of primary school textbooks and analyzed different images and contents of English and Urdu selected from Class-I to Class- V. The study is concluded that undoubtedly powerful tools that impact the minds and learning process of students. The different images presented in the school textbooks convey a deeper message and inculcate in minds of students national values and cultural practices of a particular society or area. Although, the images presented in school textbooks are significantly vital in students learning outcomes; however; these images also produce and reproduce gender differences as it define the streams of boys and girls, portray the values of dominant class, and reinforcing religious bias and divisions instead of creating cultural and religious harmony. Further, it constructs child self-image and informs them about their future role playing. The images in the textbooks also convey a message to students that it is obligatory for children to be patriotic and presents patriotism as a religious value.

Suggestions

Based on study findings it is suggested that images in textbooks shall be framed in way that consider the social fabric of society. These books and images therein shall create socio-cultural and religious integration instead creating cultural and religious biases and divisions in society. As these images and contents reproduce gender and class hierarchies and it is suggested to develop these images in a careful manner that consider the interests of all classes in society. The significance and presentation of national dress and language is important, however this study suggest that proper space shall be given to presentation of regional and local dresses and language in the textbooks

images and contents. Finally, it is suggested that a task force comprising of different academicians shall be developed and entrusted with the task of observation images and contents if textbooks for the larger interest of the country and creating national integration.

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