

English Step–I: A Critical Approach for Pictorial Analysis

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Abstract

The study critically analysed the pictures given in English Step – I, a textbook by Punjab Textbook Board, Lahore. A sample of 340 newly admitted students of Class – I from 17 randomly selected Government Primary Schools of Tehsil Multan along with their 17 teachers were involved in the study. Two surveys were conducted at different stages. At initial stage, only one question was asked i.e., what does the picture represent?, about each and every picture given in the textbook. All possible immediate responses regarding each picture were recorded serial-wise. All those pictures which were having only one or two titles were dropped from the final survey so fifty pictures out of ninety (55.56 %) basic pictures were included in the final survey. Permission was sought from the heads of the institutions and concerned teachers were consulted before conducting the final survey. In the final survey, the concerned teachers were helpful to make each student feel at ease to respond to the researchers. Data from all 340 students were collected individually by asking very simple questions. Moreover, three senior teachers of English from school cadre and two experts from the field of textbook analysis from the Department of Education Bahauddin Zakariya University, Multan were also consulted for their expert opinion about the said pictures. It was concluded that neither the book is 'Teachers' Book', nor the 'Students' Book', and even not the 'Work Book'. It is composed of small sized, un-necessarily repeated, complex, unfamiliar, and confusing pictures for rural as well as for the urban students.

Keywords: *Textbook; Textual Pictures; Teacher Book; Student Book; Work Book; Help Book*

1. Introduction

A book has been a source of communicating knowledge since the establishment of the humankind. Three well acknowledged religious books had been named with three prophets before Islam, such as 'Zaboor' was revealed to Hazrat Dawood (A. S.), Tourait to Hazrat Moses (A.S.), and Bible to Hazrat Jesus (A. S.). Certain Suhif (booklets) have also been quoted with reference to the Prophets like Moses and Abraham. The records of Tourait were found on the stones and clay. History has pointed out that the books were written on clay, rocks, broad and flat leaves of the trees, cloth, hard matter like iron or bronze, and skin of the animals. With the invention of paper in Egypt (Strong & Boretsk, 2009), the concept of the book changed and hand written or calligraphed books came into being. The invention of the Printing Press (Ament, 2007) revolutionized the shape and form of the book. It has been explored that earlier books were related to the religion, logic, language, philosophy; Science and Mathematics. Few records of books were mentioned between the era of Hazrat Jesus and Hazrat Muhammad (S.A.W.). Then 'Al-Quran' became the first core book for the Muslims in the first century of the Muslim era. At that time the 'Quran' was in the form of a calligraphed book. Mostly 'Quran' was recited and learnt by heart.

On the basis of the material with the help of which, the book is made up of, the book may be a paper book, hard card book, scrabble, visual book, or an electronic book. With respect to the usability of the book in a library, a book is either issue-able or non-issue-able/ reference book. If the nature of binding of the book is considered, then the book may be paper bound, hard bound, ring bound, tape bound book, or loose-sheet book. If the arrangement/presentation of content is considered, the book may be a students' book, teachers' book, help book, practice book (writing or reading), picture book, cartoon book, talking book or work book. On the basis of the nature of the content, the books were classified as General (Knowledge, Story, Social, Science, Language, Novel, Fiction, Prose or Poetry, etc.) books and Subject

(Religion, Physics, Chemistry, Biology, Geography, Mathematics, Psychology, Social Studies, Economics, Music, etc.). If the user of the book is a special person, then the content and presentation of the content is also specified one in the Special Books, for example ‘The Braille Books’. All such subject related books either compiled, or edited ones are treated as textbooks, and such textbooks are employed by educational institutions for their students because they contain standard work on a particular subject as mentioned in the course outlines.

A textbook is referred as a tool for learning, when that tool is used by a student, because that contains specified learning material for a student of a particular age. In pedagogy, when a tool for learning is applied by a teacher to make the students to learn some text, the same tool for learning is termed as a teaching tool, which is quite different than that of a learning tool in its real sense. It means all teaching-learning activities revolve around a specified learning material or text that reflects prescribed curriculum for a well defined age group. That is why, a textbook which contains specified text is a translation of the pedagogical concepts outlined in a curriculum, but it is not a mere curriculum, because most of the competencies and sub-skills cannot be learnt only through a textbook. Homer’s Poems became the first school textbook then Romans added Virgil. Due to the interaction of the textbook and teaching-learning environment, ideal demands for presentation of text in a textbook revolutionized the concept of textbooks. A discussion of ‘Narrative vs. Expository text developed new dimensions like “Students’ Ability to Understand the Text”, which led towards certain basic characteristics for presentation of text, for example Structure (Words or Phrases, Headings and Sub-headings, Cause and Effect); Cohesion (Interesting, Comprehensible, Readable), and Audience Appropriateness of the text. Most important aspect of the audience appropriateness of the textbook is to present new concepts in such a way that they tap the reader’s prior and relevant knowledge towards understanding. Keeping the understanding of the reader in mind, different authors used pictures/ illustrations, diagrams or graphs to make the content understandable (Shah and Tariq, 1987, p. 43). Comenius (1592 – 1670) was perhaps the first man to write an illustrated textbook “Orbits Pictures” for the children (Chaudhary 1986, p.55). Dwyer and Lamberski (1983, p. 325) and Sarah Guri-Rozenblit (1988, p. 220) examined the effective use of diagrams for explanatory purposes in social science text. Moreover, Shah and Hassan (2005, p. 350) proved the importance of illustrations in understanding the content. A significant difference in the performance was found between the students of experimental group and controlled group.

This important aspect of the textbooks in any educational setup enforced the Ministry of Education to establish Textbook Boards in all provinces. In 2007 the ministry promulgated an action plan entitled as “**National Textbook and Learning Materials Policy and Plan of Action**”. The main objective of the Government of Pakistan (2007) was described as:

“Improvement in the quality of education at all levels through better quality textbooks at affordable prices and other learning materials for promoting Pakistan as a knowledge-based society.”

By keeping the above mentioned Plan in view, the Government of Pakistan (2009) emphasised in the National Education Policy 2009 as:

“A well regulated system of competitive publishing of Textbooks and learning materials shall be introduced”

When a system of competitive publishing of textbooks is being introduced, the researchers decided to point out the basic flaws of the Step – 1 English Textbook, which might be misleading the developing minds towards confusion just at the initial stages. When the foundations are faulty, how can we achieve the national objective of promoting knowledge-based society at primary, secondary or tertiary levels of education?

During literature survey, it was found that more than twenty unpublished Master Level research reports were submitted in the Department of Education, Bahauddin Zakariya University, Multan about Textbook

Analysis. But no one stressed the importance of pictorial analysis, though so many pictures/illustrations are included in the textbooks at elementary level as Saeed (1997) mentioned 98 pictures in all in English Step – 1, and there were 288 pictures in English Step – 1 Textbook published in 2008.

2. Research Methodology

To analyse the pictures, the researchers obtained Step – 1 English Textbook published by Punjab Textbook Board (2008) for the session 2008 – 2009. All students of Class – I enrolled in all government primary schools of Punjab along with their English teachers were the population of the study. Total surface area of the textbook was calculated and surface area covered by the pictures/ illustrations was also computed. Number, nature and the size of all pictures were also calculated and a serial number was allocated in sequence to all pictures given in the textbook. Then to check the understanding of the students of Class – 1 about the pictures/ illustrations given in English Step – 1, surveys were conducted at two different stages. At initial stage, the survey was conducted in April 2008. In this survey only one question was asked about each and every picture given in English Step – 1 Textbook, from five boys and girls each from urban and rural area of Tehsil Multan. The question was “What does the picture represent?” in the textbook. All possible answers regarding each picture were recorded serial-wise. This survey helped the researchers to prepare a list of possible titles/ captions of each picture. All those pictures which were having only one or two titles were dropped from the final survey to save time and energy. So, fifty pictures (55.56 %) out of ninety basic pictures were included in the final survey. A serial-wise checklist of titles/ captions of each textual picture, as labelled by the students were typed as a tool of the study with one or two open options to include any new title if suggested by the students.

The researchers selected ten government primary schools from urban area and ten from rural area of Tehsil Multan on the basis of random sampling technique. The researchers approached the heads of all sampled institutions and requested to grant permission to conduct the final survey in newly admitted class – I students of all institutions. The heads of three primary schools two from urban area and one from rural area did not allow to conduct the survey on the basis of one or the other reason. So, final survey was conducted in seventeen primary schools including nine schools from rural area of Tehsil Multan. From each primary school ten boys and ten girls were selected randomly to collect data. In all 340 students and seventeen teachers were involved in the study with equal representation of sex. Each student was attended individually to provide opinion and answer of very simple questions like: ‘Have you ever seen such object?’ and ‘What does it look like?’ Such questions were asked about each and every picture included in the final survey in a friendly environment. First and immediate response of each student was ticked in the checklist of pictures prepared for the said survey. Any new response was further included in the list. On many occasions teachers of the concerned classes were also requested to accompany the researcher to collect data from shy students. Moreover, three senior teachers of English from school cadre and two experts from the field of curriculum development at university level were also consulted under a scheduled programme. Their expert opinion about the figures/ pictures given in the English Step – 1 was also included in the analysis of data.

3. Results and Discussion

The size of the page of the given textbook (2008) was 18x23 cm and there were 30 pages in all which were related to the students. The total surface area available was 12420 square centimetres. Out of that surface area, 604.8 square centimetres were allocated ‘For the Teacher’ and 4536 square centimetres were reserved for 288 pictures of different sizes. It means 15.75 square centimetres area was the average area for each picture. Actual range of picture size was from 0.2 x 1.5 cm to 6.0 x 15.5 cm. There was only one large sized picture about ‘Parts of the Body’ given at page 30. The minimum sized ten pictures of pencils were given at page 28. At the same page, other minimum sized five pictures were of pens (0.2x1.7 cm), and eleven pictures of stars (0.8x0.8 cm), as summarized in Table No. 1.

Table 1. Size-wise and Alphabetically Representation of Pictures in the Textbook

S.#	Sub-Head	Description	Number	Percentage	Remarks
1.	Size (Minimum)	0.8 x 0.8 cm	11	03.82	Stars
		0.2 x 1.5 cm	10	03.47	Pencils
		0.2 x 1.7 cm	05	01.74	Pens
2.	Alphabetical Representation	U, W, Y.	03	11.54	One Each
		I, J, N, O, Q, V, X, Z	08	30.77	Two Each
		G, H, K, L, M.	05	19.23	Three Each
		A, P, R, S, T.	05	19.23	Four Each
		E.	01	03.85	Five Pictures
		C, D.	02	07.69	Seven Each
		F.	01	03.85	Eight Pictures
		B.	01	03.85	Nine Pictures

There was one picture each for three (11.54%) alphabets like 'U represented by Umbrella', 'W by Watch' and 'Y by Yacht'. Two pictures each for eight (30.77%) alphabets such as 'I was represented by Igloo and Inkpot', 'J by Jug and Joggers', 'N by Nest and Net', 'O by Owl and Ox', 'Q by Quaid – i- Azam, and Queen', 'V by Van and Vas', 'X by Xmas tree and X-ray' and 'Z by Zip and Zebra'. Five (19.23%) alphabets were represented by three pictures each, for example 'G by Glass, Globe, and Goat', 'H by Hat, Hen, and Horse', 'K by Kettle, Key and Kite', 'L by Lamp, Lemon and Lion', and 'M by Mango, Monkey and Mug'. Another five (19.23%) alphabets were represented by four pictures for each alphabet, like 'A by Aeroplane, Ant, Apple and Axe', 'P by Parrot, Pen, Pencil, and Parts of the Body', 'R by Rabbit, Ring, Rod and Rose', 'S by Slate, Spoon, Star and Sun', 'T by Table, Tap, Top, and Torch'. An (3.85%) alphabet 'E' was represented by five pictures like 'Ear, Egg, Eagle, Elephant and Eye'. Two (7.69%) alphabets were represented by seven pictures each as 'C by Camera, Cap, Car, Cat, Classroom, Coat and Cup'; Likewise 'D' was represented by 'Desk, Dog, Doll, Donkey, Door, Drum and Duck'. One (3.85%) more alphabet 'F' was represented by eight pictures of 'Fan, Feather, Fish, Flag, Flower, Football, Frock and Frog'. Finally another (3.85%) 'B' was represented by nine pictures like 'Bag, Ball, Banana, Bat, Bed, Bell, Blackboard, Book, and Butterfly'.

Through keen observation it was concluded that basically ninety simple or complex pictures were produced to make a child of +5 year either clear or confused with the help of un-captioned pictures. Out of 90 pictures 43 (47.8%) appeared once, e.g. (the picture of axe, ant, blackboard, book, bat, banana, butterfly, bed, classroom, camera, car, coat, door, donkey, dog, eagle, ear, eye, elephant, fan, feather, fish, flag, frock, frog, goat, hat, horse, igloo, kettle, lion, lemon, monkey, net, ox, parts of the body, The Quaid, rod like chalk, rose, spoon torch, vas and x-ray were given once) Rest of the pictures were repeated two to seventy times, for example, the picture of 'Star' was repeated for seventy times with different colours, 'Pencil' for 14, 'Key' for 12, 'Egg' for 11, 'Mug' for 10, 'Pen' for 9, 'Bag' for eight times and so on. It means only those pictures were repeated which occupied relatively shorter space. This reflected that the objective of printing maximum number of minimum sized pictures was to minimize the cost of the book by reducing the consumption of paper. It proved that the objective of financial saving 'is more important than that of the cognitive development of the child!' About 98% of the pictures were simple as per the understanding of the children, but a few pictures were very complex, for example 'Nest', 'Igloo', 'X-ray', 'Xmas Tree', 'Yacht', and etc. Usually one to four different pictures represented each alphabet. But there was a variety of different colours of 'Star'. There were nine pictures to represent 'B', eight for 'F', seven each for 'C', and 'D'. Unequal distribution of the pictures was also observed, as 42.71% of the total pictures were adjusted at page 27 and 28. Eight (8.89%) concepts out of ninety pictures were produced schematically. Three images of the numbers were also given in the text, which were not included in the list of the pictures.

On the basis of the living and non-living objects included in the pictures, it was found that there were about 22% living objects and 78% non living. Only 02% coverage was given to the plants, 03% to fruits, 11% to animals including 03% wild animals, and 05% to human beings. Gender-wise distribution indicated sexually biased distribution because there were about 04% pictures of males and about 05% females. About 03% birds, about 08% pets, less than half percent of insects, 09% bipeds and 07% tetrapeds were included in the pictures. About 98% of the pictures were familiar to the urban children and 92% to the rural children.

Although the number of unfamiliar pictures was very few, yet very interesting results were drawn from the data. For example:

- A portable blackboard was familiar to about 53% of the students.
- Globe was not seen by 67% of the students.
- A picture of chalk labelled as wrapped paper / rod on page 1 was taken for by very few students as 'Rod'. A few teachers were also not clear about this picture.
- A blackboard over the head of the teacher was pointed out by very few teachers.
- A torch was pointed out as "battery" by 90% of the rural students.
- A three legged table was point of curiosity for 45% of the students from rural area.
- The 'Sun' was taken for callotropic seed by 100% students from rural area.
- Most of the students from urban areas were unaware of 'The Nest'
- A majority of the rural students had not seen such 'Net'.
- 'Rose' at page 3, but the same picture was taught as 'Flower' at page 9, caused confusion among students and they asked 'Which one is correct?'
- An 'Apple' along with a piece, without any cut on the apple was pointed out by the teachers as well as by very few students.
- A 'Cup' without saucer at page 3 and 6, but with saucer at all other places, wherever that was/were shown as cup forced the students to raise question. About 45% of the students from rural areas insisted the 'Mug' as a cup.
- A 'Door' without wall was usually treated as window by rural students.
- The 'Donkey, Horse, and Zebra,' were interchanged with each other by very few students.
- The 'Eagle' was also least known to the majority of the students.
- The peacock feather was read as 'Moor punkh' and not as feather.
- A 'fan' as indicated in the text was read as 'Table Fan'. By very few students.
- The 'Hat' was read as 'Felt' by a few urban students.
- The 'Igloo' was the least understandable concept for the students. Even few teachers could not spell the word properly. About 80% of the rural student took that for as a 'Coo pay' where coal is produced by burning of wood.
- Joggers were misspelled by the teachers and a majority of the rural students read "J" for 'Jota'.
- 'Lemon' and 'Mango' were also intermixed with each other.
- Not a single student and teacher had seen the 'Owl' in natural environment.
- All students from rural area and a few from urban area read the 'Queen' as a 'woman' and a few said the 'Bride'.
- Very few students from rural area know about the 'Vas'.
- Not a single student from rural area and a few from urban area were aware of 'X-ray'.
- No concept of 'Xmas Tree' to all rural and a few urban students. All students from Christian family were well aware about 'Xmas Tree'. Few teachers misspelled the 'Xmas Tree'.
- The 'Yacht' was misspelled by the teachers and 95% of the students treated the 'Yacht' as boat.
- The 'Pen' was read as the boll point by a majority of the students from urban and rural areas.
- Purple and green stars in light and dark shades have not been seen by the students.

On the basis of the opinion of the senior English teachers and experts contacted by the researchers, following expert opinion is also summarized:

A few common objects almost similarly pronounced in Urdu and English are included in the introductory English Step – 1, which is a good effort. For example Desk, Globe, Pencil, Glass, Slate, Boll Point, Camera, Coat, Car, Joggers, Jug, etc can be more benefited, if the students will see the difference in written captions of the picture. Otherwise, the student will recall the object only in mother tongue not in English. Such words help the students to be confident in learning any second language.

The captions given almost at each page like ‘Things in the Classroom’, ‘Sounds’, and ‘Look and Say’, etc were not taught by the teachers, even then the students pay a lot of attention and waste their precious time to understand those captions. It is also possible that the students might think ‘The teacher himself/ herself did not know about those captions’. A similar possibility may be described about the instructions given under the heading of ‘For the Teacher’ at the bottom of 16 (53.3%) pages and at the top of 12 (40%) pages. This factor proved that the said book was designed as ‘Teachers’ Book’ and not as ‘Students’ Book’. Moreover, there were 10 (33.3%) pages where students were directed either to join dots, or to write first letter of the object shown in the picture, or to match the picture with letter by drawing a line, etc. Such undeclared activities changed the status of the book from ‘Teachers’ Book’ or ‘Students’ Book’ to ‘Work Book’. It means that the said book was a combination of ‘Teachers’ Book, Students’ Book, and Work Book’ as well.

It is useless to include such pictures for class I students, which are not familiar with the students for example, Portable blackboards, which are not available in majority of the primary schools. Desks, which are not used by primary class students as given at page 1 and 7. A Globe, which might be decorated in the office of the head of the institution (if available) and primary class students had no interaction with the globe at all. A picture of Chalk/Wrapped paper, and ‘Battery’ to be taught as ‘Torch’ could be avoided. The picture of the sun is confusing, because the children could not see the sun in its real form. A picture of boll point at page 2 is taught as a ‘Pen!’ The concept of ‘Nest’ might be abstract for urban students. A picture of ‘Flower’ was explained as ‘Rose’ at page 3, and flower at page 9, which developed confusion in the immature minds of the children. Similarly, cup given at page 3, and 6 is without saucer, but at page 28 and 29, the cup was accompanied with saucer. The introduction of ‘Mug’ at page 13 and then placing both ‘Cup’ and ‘Mug’ at page 28 may cause confusion for rural students, because both concepts were taken for the same that is ‘Cup’.

A door without wall and snapped from inside the room with an external view might be least useful than that of vice versa. An eagle may give a concept of wild crow and creating misunderstanding. A fan can be a ‘Table Fan’, or ‘Pedestal Fan’, which was very much clear to the urban students. So, labelling a table fan as only ‘Fan’ might irritate the developing mind. Igloo can never be picked in our social setup. ‘Igloo’ as the name of an ‘Ice Cream’ has further misled the students. Though, the book has created a concept that students were learning the sounds of the objects, not those objects in their real sense, which could be proved from the ‘Inkpot’. On the inkpot, the word ‘Ink’ is boldly mentioned that could cause confusion at lateral stages of cognitive development, when the students would learn the reality of ‘Ink’, ‘Inkpot’, and ‘the Bottle as Inkpot’. ‘J’ for ‘Joggers’ was O. K. for urban students, but more than 70% of the rural students learnt “J” for ‘Jota’ in national language.

Some pictures related to few alphabets were allocated one full page like ‘A to F (23.08%)’. Pictures related to ‘G to J, and P to T (34.62%)’ were printed in vertical sequence, but the pictures related to ‘K and L (07.69%)’ were printed in horizontal placement. The position was worse with respect to the pictures representing ‘M, N, O, U, V, W, X, Y, and Z (34.62%)’, where no proper sequence or pattern has been adopted for each page. This intermixing of vertical, horizontal or a mixture of both would never make the student to understand to link proper alphabet with proper picture for example ‘Vas’ was related to ‘V’ or ‘W’. ‘X-ray, Xmas Tree, Yacht, and Zebra were least conceivable pictures for a student of +5

years old. From page 18 to 21 (13.33%), the students were supposed to produce the sound of the first letter of the picture or write the first letter of the name of the picture from among the letters given as caption of the page. Moreover, the students have to match the picture with the first letter of the name of each object. It was very unfortunate that students were not provided any example to learn the name of the object in written form or see the first letter of the name of the object as close to the object as possible. Actually, the letters or alphabets were given as the caption of the page and the pictures were printed either vertically or horizontally or without any sequence, which did not prepare the students for such activity.

Capital and small letters were introduced at page 21, but capital and small letters were used in the book just from page 4 to 20 (56.67%), whereas, the teachers were instructed about the use of small letters at page 12. From page 24 to 26 (10%), the students were supposed to complete the names of the objects by inserting any vowel. It was astonishing to note that up to page 23 (76.67%), the full name of any object was not given or shown to the students in the text, but being asked as an activity or exercise, which might lead towards developing a puzzled mind. An introduction of vowels and consonants at this stage might be an overburdening activity.

To accommodate more pictures on certain pages, the allocation of minimum sized margins were further reduced, which ultimately developed the impression of providing 'free of cost' textbooks to the students at the cost of reduced cognitive development of the nation. The reduced margins may also help to declare the book as 'Non-standard' book.

4. Recommendations

On the basis of the above mentioned results following recommendations are hereby suggested:

1. Do not include such pictures in the text which are not familiar to the students at the introductory level of secondary stage.
2. When any second language is being introduced at early stages of cognitive development, it is necessary to use full page sized pictures in natural colours for making the concept of the learners clear.
3. Repetition of any concept for more than sufficient times causes boredom that must be avoided.
4. It should be tried to distribute the pictures equally with respect to the requirements of the text. The congestion of pictures at certain pages may cause to loose the interest of the readers in the forthcoming pages.
5. If any instruction is to be delivered by the teachers to the students, that instruction should not be included on the page, which is to be taught to the students. Because the teacher would omit that particular portion and the immature reader would pay more attention towards that word or sentence which was omitted by the teacher. Therefore, separate versions for teachers and students at early stages might be more fruitful.
6. If the student is advised to use lead pencil etc to join the dots to complete any picture or match the letter with concerned picture etc, it means we are training the students for making the textbook dirty and developing unhealthy attitude towards preserving the textual material. Therefore, workbooks should be prepared separately for students' activities or practice.
7. If there are financial constraints for the Government to provide separate 'Workbook' free of cost, then the private sector should be encouraged to compete for the development of ideal workbooks instead of allowing them to print the low-cost sub-standard textbooks.
8. Proper margination in the textbooks helps to convince the international experts that third world countries are also trying to improve their textbooks for Quality Education.

9. If all pictures are given along with the nomenclature, the students might not inter-mix the donkey with the horse or zebra.
10. If it is unavoidable to present the pictures related to two or three alphabets on one page, then one sequence of presenting the pictures either horizontally or vertically, be maintained through out the book.
11. Instead of using the word Singular – Plural as given at page 28 for the students that might be much better to use the term ‘One’ and ‘Many’.
12. The process of labelling the ‘Parts of the Body’ can be improved by drawing the indicating lines parallel to one another.

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