



# Designing for Children 2019

## - Play and Learn

**Title:** Exploring the semantic way of teaching English alphabet to the children of Indian vernacular medium schools.

Abhay Verma, Central Institute of Technology Kokrajhar, Assam, India, vabhay7070@gmail.com

Abhijit Padun, Central Institute of Technology Kokrajhar, Assam, India, a.padun@cit.ac.in

**Abstract:** The English alphabet system is one of the most widely used systems in the world today. It is also one of the official and widely used languages of India. The wide acceptance of such an important script makes it very essential to be taught in the schools at the primary level. Although, a lot of experiments were explored to teach English alphabet till now, even using technology as well, conventional method is still preferred. Due to this, vernacular medium school children face a lot of problems as they could not connect with the method of conventional teaching.

This article describes an experiment which tries to address this issue by exploring a semantic way of making the English language and alphabet understandable to children in their early stage. Further, the experiment also tried to conceptualize a teaching methodology for English alphabet suitable for the primary level children of Indian vernacular medium schools.

**Key words:** Semantic typography for children, Vernacular medium school children, English alphabet teaching methods, Typographic experiment, Effective visual communication

## **1. Introduction**

In India, people who are coming from vernacular medium of education system use to struggle with their English proficiency skills which, limit their communication potential and results in low self-confidence level. The effective solution demanded the treatment of the teaching methodology for children at primary level education.

The approach of teaching a foreign language such as English to children requires more attention to see whether they can understand the information or not. It may start with teaching the alphabet system of the English language.

It was observed formerly, that the root cause of the problem lies in the conventional English alphabet teaching techniques and unspecified teaching methodology to the primary level children of the vernacular medium schools, as it focuses on compelling children to remember the alphabet. English words and supportive visual information in the form of complex illustrations are presented rather than making them understand the concept of learning alphabet in a systematic way.

Multimedia played a major role in presenting several contemporary approaches which are available in the form of playful interactive videos, the personification of the alphabet, presenting alphabet with cheerful sounds and many more. But, none of these methods solve the problem of compelling children to remember the diverse complex visual information and schools are not equipped with suitable technology as most of the vernacular medium schools are located in the rural parts of India which further intricate the teaching process.

Hence, this research paper tried to address the issue by developing a flexible teaching methodology which can be straightaway followed by the teachers to make children 'Understand' rather than 'Remember' the English alphabet.

## **2. Background**

In a country like India, it is a very big challenge for the primary level children of vernacular medium schools to acquire English proficiency skills because language is a 'Skill' to practise rather not a 'Subject' to remember, and with the unsubstantial foundation it is almost impossible for the children to further enhance, develop and practice this skill in their daily operations.

One of the significant underlying reason behind the weak foundation of the language is inefficient teaching practices of the English alphabet system, which is usually done by

associating a letter with any physical object such as 'A' for 'Apple' which is presented with any complex graphic representation of the object.

Effective absorption of the conventional methodology is considered to be difficult for the primary level children of vernacular medium schools. The overall teaching process is also complicated for teachers because of the following reasons:

- Ineffective learning is found when books designed for English medium schools are used to teach the children of vernacular medium schools.
- Classes are composed of mixed ability groups which is a feature of every vernacular medium school either based in a small town or villages. This sets a problem for the teacher to teach and communicate with the children in a homogeneous way.
- Unstipulated methodology which focuses on using vernacular language as a medium to facilitate the Alphabet learning process.

### **2.1 Need Identification**

Bodo is a tribe of Assam region which alone has more than 1.2 lakh speakers and have their own language system.

Among the Bodo medium schools of the Bodoland region in the state of Assam (India), English is considered to be a very complicated language to teach and learn. Hence, the need for a methodology which can be adapted effortlessly by the teachers of varying skill levels and uses vernacular language as a method to teach English alphabet.

### **3. Literature Review**

Based on the research done by many scholars on teaching methodology, few very important findings are summarized as follows.

Assam is a multilingual state of India which is composed of various tribal communities. So in the schools, English is taught as the second language first being their mother tongue and the foundation of English proficiency skills are best acquired and developed among the students when their mother tongue facilitates the process.

Most of the vernacular medium schools in Assam have formal teaching of the alphabet system, where lack of uniformity is found regarding methods and material used. Thus, the rural children were found to be lacking in almost all the skills connected with the school readiness at the age of five, when most of them were expected to enter the first standard the of school.

Hence, there could be a new way of bringing innovative ideas like semantic expression of alphabet in their own language to teach English language.

As stated by Ji Lee, a Korean designer who started a design project more than 20 years ago and also encouraged his students to see letters beyond their dull and practical functionality. The challenge was to visualize the meaning of a word, using only the graphic elements of the letters forming the word without adding any outside parts which ultimately evolved as “Semantic Typography”. Horizon of Semantic Typography can be expanded as a tool for teaching and learning process because a new study reveals that children’s language development is a learnt skill and is intricately linked to their ability to recognize patterns in their environment.

#### 4. Aim and Objective

**Aim:** To design a methodology which can be used for teaching English alphabet facilitated by vernacular language to the primary level children of Indian Vernacular medium schools.

**Objective:**

- To identify a vernacular medium school in Bodoland region of Assam, India.
- To understand the local medium of teaching and explore objects and meanings in regional language.
- To explore semantic ideas in native language familiar to the children for representing English alphabet.

#### 5. The Methodology

##### 5.1 Initial Brainstorming:

To solve the problem of developing a system which is flexible enough to be utilized by the children as well as the teachers of the vernacular medium school’s various approaches were explored and critically analyzed to arrive at the foremost effective solution.

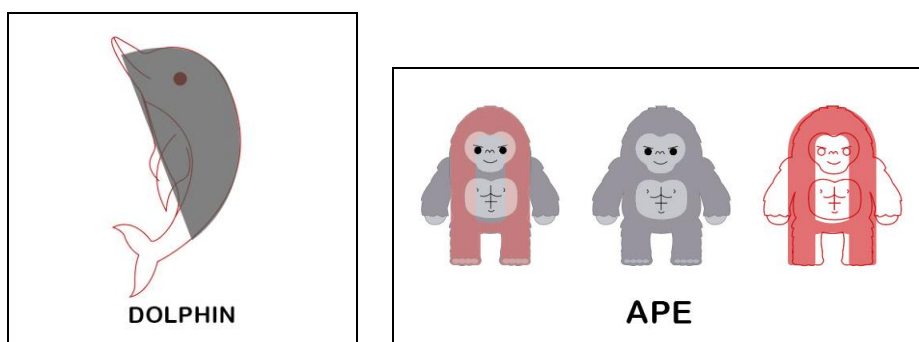


Fig. 1. Initial explorations

Approach 1: Various words from the English language were explored for further

development of the semantic expressions accordingly, but standalone semantic expressions were not enough to solve the issue as children are still required to remember the English words and letters.

Approach 2: The first approach was further explored, and it was decided to present the physical objects while teaching the children for better understanding of the object and alphabet associated with it. But it would not be possible for every object.

Preliminary Outcome: The previous approaches were unsuccessful to address the problem entirely and to make children retain a letter, word and supportive visual information because they are still required to remember the English words.

Final Approach: In the final approach the Bodo language which is written in Devanagari script was chosen as the primary language to teach English to the primary level children of Bodo medium schools. This approach may solve the issue of making children to remember the English words because they're already familiar with the Bodo objects and their names.

## 5.2 Initial Survey: A visit to a Bodo medium school

A Bodo medium school situated in Kokrajhar district of Assam was chosen for the initial study. To better analyze the conventional alphabet teaching system, students were asked to draw objects and letters sequentially as they have been taught so far. It was found that, maximum number of students struggled to draw and recall the standard order of the letters, words associated with the letters and object visuals which are associated with the words.

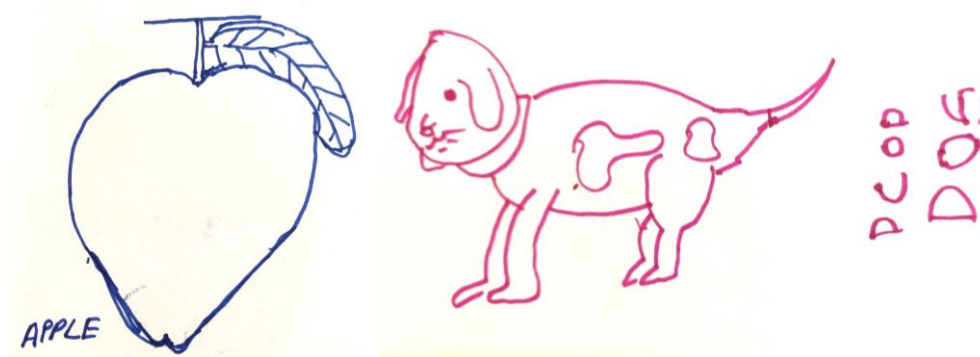


Fig. 2. Pictures drawn by school children during the visit

## 5.3 Phonetic Conversion

The Bodo language have been chosen for further exploration in terms of words and alphabet association with objects based on the English language system.

The first step was to convert the English alphabet into the Devanagari alphabet based on

the phonetic sounds of the English alphabet. The phonetic conversion facilitated the process of searching relevant objects based on their names in Bodo language.

#### 5.4 Objects exploration and picture collection

Objects which are most familiar to the children was considered as one of the most critical aspect for the objects exploration. Most of the objects were locally explored in the region of Bodoland by visiting markets, interviewing people, exploring literature and by self-observation so that, the objects used for the development of semantic expressions are the ones by which Bodo children are surrounded by.

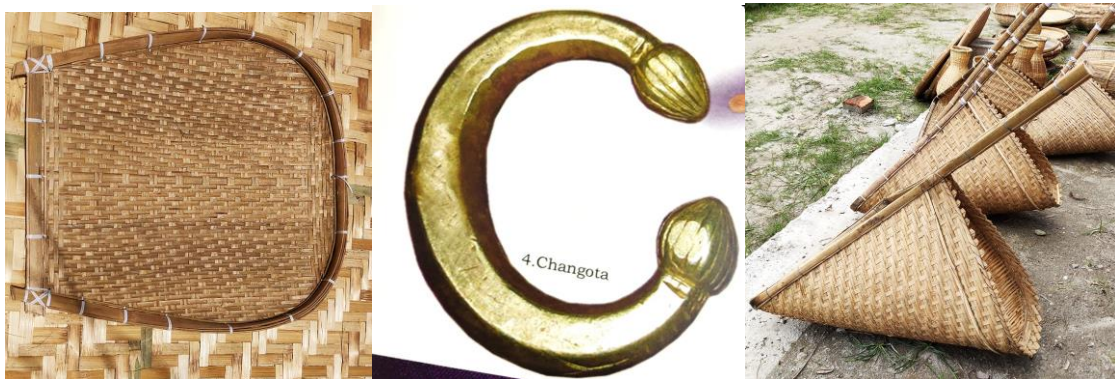


Fig. 3. Collection of the objects

#### 5.5 Conceptualization

##### 5.5.1 Form and shape analysis of the Objects

The physical and the pictorial objects collected were further broken-down into more simplified versions by drawing, to study the aesthetics of the objects from multiple perspectives and proportions.

##### 5.5.2 Letter Matching

To develop the semantic expressions of the objects explored, shape of the English letters was matched with the simplified drawings of the objects accordingly.

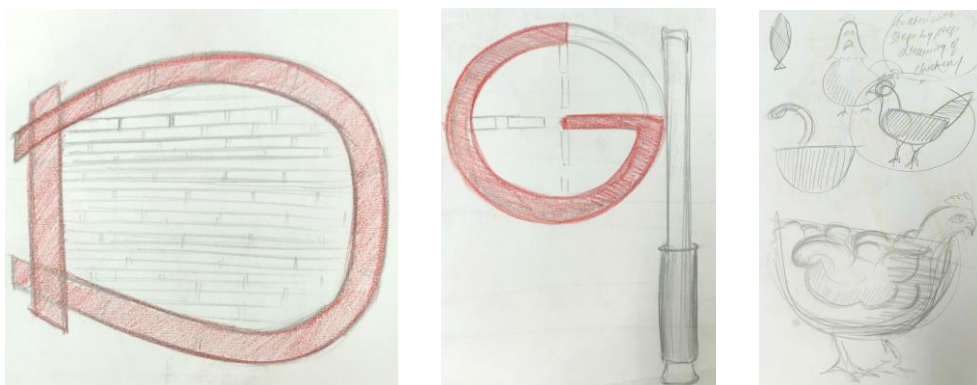


Fig. 4. Drawings of letter exploration in the objects

### 5.5.3 Expression development phases

Each semantic expression was effectively broken down into steps of transformation by modifying the characteristics of a letter in a certain way to obtain the semantic expression.

### 5.5.4 Sorting and Matching

Diverse range of objects were explored and the association of the objects with the letters on the basis of overall form, shape, viewing angles and proportions was carefully examined and the evident ones for designing the semantic expressions were chosen for the illustration process.

## 5.6 Illustration

Simplified sketches were made of the relevant objects and a suitable English letter has been emphasized in them. After the completion of the sketching process the sketches were scanned for the vector digital conversion, which allowed the illustrations to be printed in any size or colour.

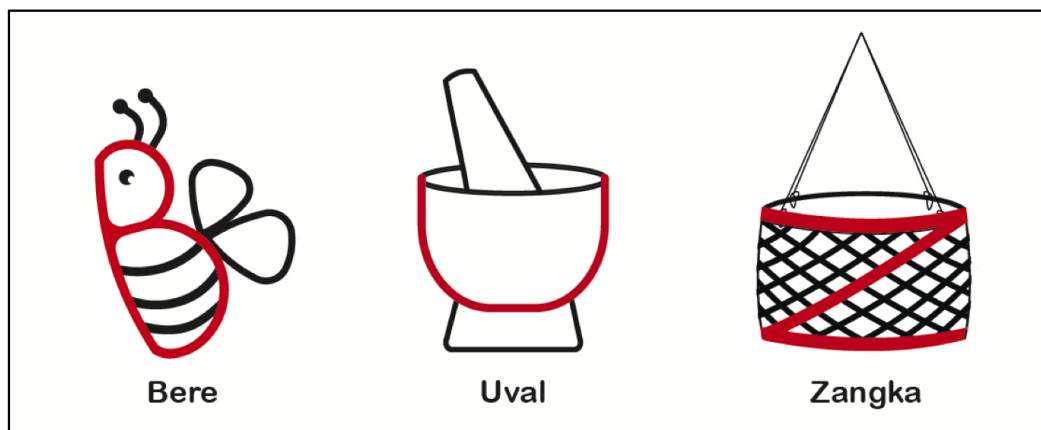


Fig. 5. Designed Semantic Expressions

### 5.7 Chart making

A chart was made by compiling all the letter, associated words, semantic expressions and the steps to develop the expressions by modifying a letter, for teaching purposes.

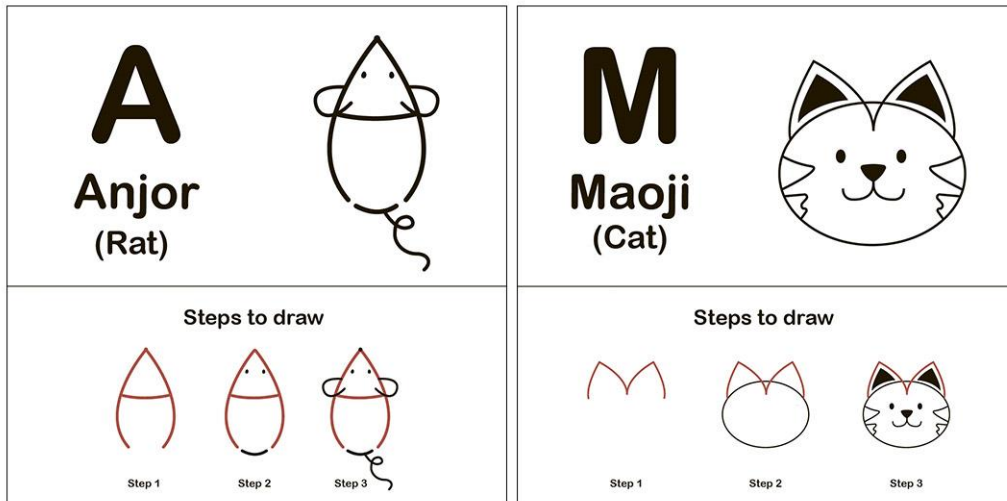


Fig. 6. Compiled chart showing necessary information

### 5.8 User Survey- Feedback and Review

The fully designed chart was presented and taught to the children of the Local Bodo Medium School and it was found that, as the objects were relatable to the children, and the core foundation of their English language was being setup by using their local language. Due to which they paid significantly more attention and revealed excitement which was missing in the case of conventional alphabet teaching method.

Each student was provided with a sketch pen and plain drawing sheets of size 34cmx42cm on which they were asked to draw the semantic expressions by following the exact same process as being taught by the instructor. After the session all the sheets were carefully reviewed and the following observations were made:

#### 5.8.1 Enhanced Understanding and Quick Adaptation

When the object was presented to the children they quickly responded with the associated letter which revealed the outstanding recall, association and understanding values which lacked in the previous teaching methodology in which children struggled to learn the letters, words and the association of the letter with the object.

#### 5.8.2 Creative integration and distinct semantic expressions

Students were asked not to fundamentally remember but rather understand the gradual process of the semantic expressions. Students had free will to practice the learning process in their own preferred way, and integrate their own creativity throughout the process. Few students adapted the developmental process and improved upon the semantic expressions which were being taught by the instructor and also tried to self-explore the vacant space of the illustration by introducing the fun element such as the smiley face in the moon (OKHAFWR).



Which shows the adaptation of the methodology and the scope for semantic explorations as a way of playful self-learning process by the children.

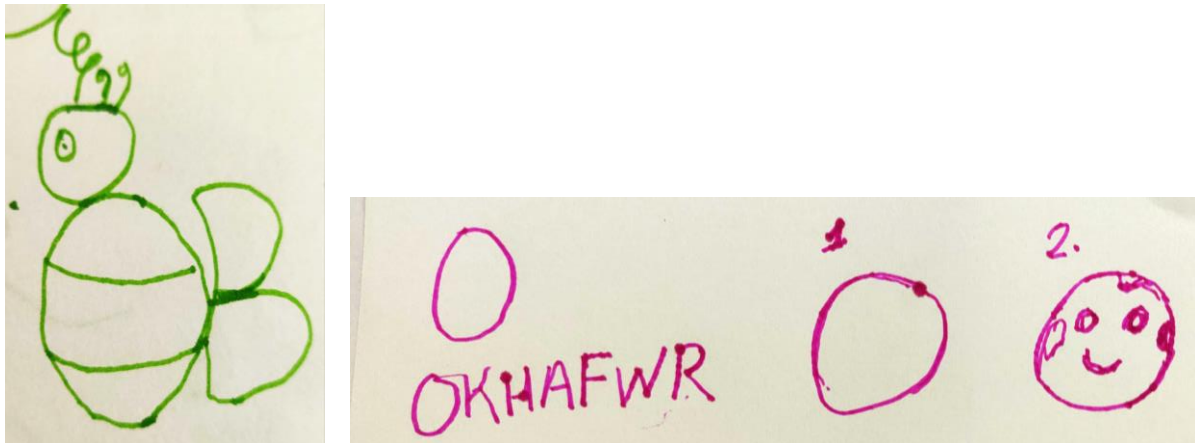


Fig. 7. Creative Integration of 'B' in the wings of the Bee and Smiley face in the moon

### 5.8.3 Variations of the same object

Some of the objects chosen were locally handmade hence, the variations in terms of form can be seen in them. Some of the students followed the same process which was taught by the instructor but, sketched the object according to their existing visual vocabulary and object interactions. Example UVAL and JAKOI.

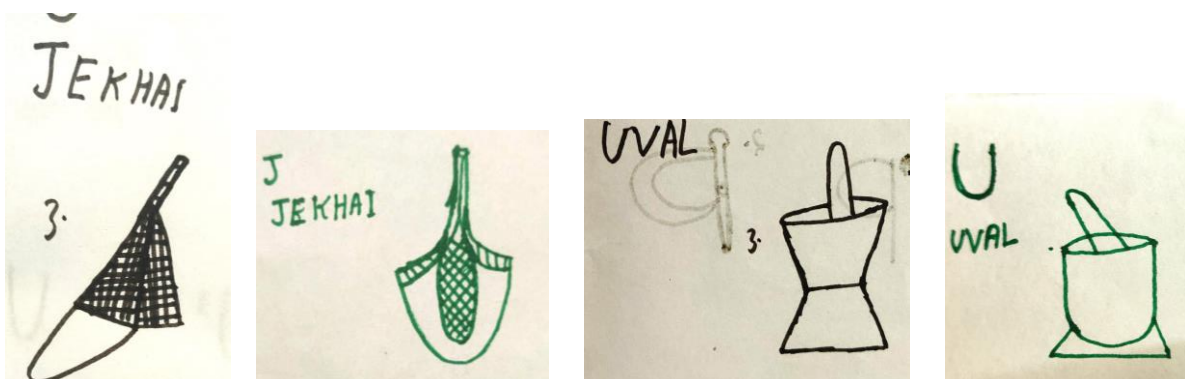


Fig. 8. Variations observed in the Jekhai (left) and Uval (right) drawings by the students

### 5.8.4 Skill Division in terms of drawing and understanding capability

Wide range of students had varying range of drawing, understanding and linking skills hence, the following observations were made based on the organized session and output.

#### 5.8.4.1 Drawing speed and arrangement

Few students patiently all arranged the visual elements and practised the drawing of the semantic expressions by drawing the illustration in segments, while others impatiently tried to draw the illustration in one stroke or stopped at multiple points which caused ink bleeding on paper.

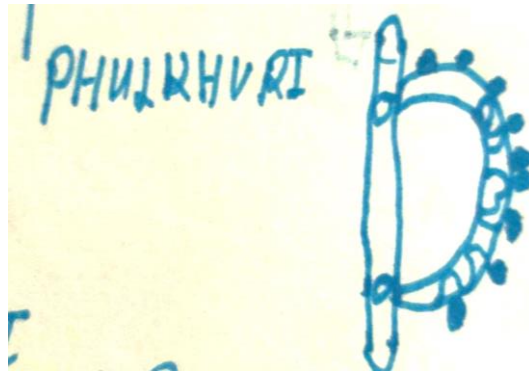
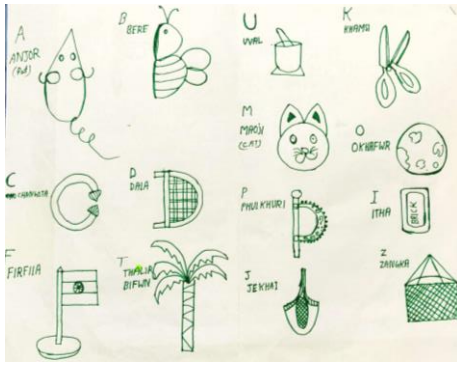


Fig. 9. Clean arrangement of the visual elements on the paper (left) and ink bleed while drawing the semantic expression (right)

#### 5.8.4.2 Lines, Curves and Proportions

Gradual steps were taught to develop the semantic expressions by modifying a letter in a certain way to obtain the consistent semantic expressions but, minor distortion was observed in terms of proportions, curves and straight lines.



Fig. 10. Merging of the straight lines (left) and difficulty in drawing the curves (right) by the students

#### 5.9 Modifications

The preliminary designed semantic expressions were tested on the children of Bodo medium schools and their feedback was recorded and reviewed. The modifications were done in the semantic expressions by carefully examining the output in terms of the proportions, visualization, drawing abilities, skill categorization, expression complexity categorization and other minor aspects to design the final semantic expressions which are commonly accepted and understood by every student.

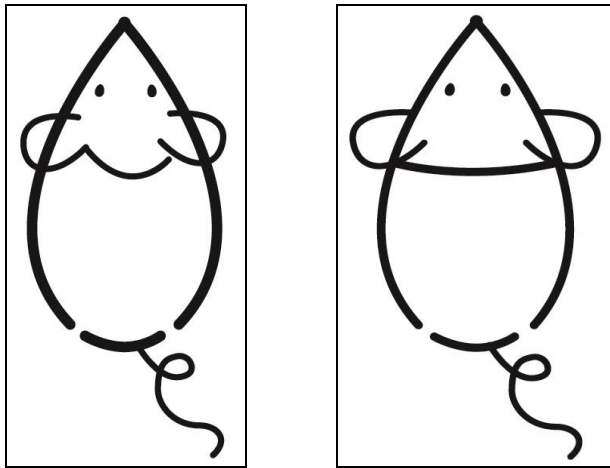


Fig. 11. Initial Expression (left), Modified expression for better understanding (right)

### 5.10 Final Design

After the completion of the semantic expressions, it was compiled in the form of a booklet which can be distributed across all the Bodo medium schools in the Bodoland region of Assam, India.

All the semantic expressions of the English alphabet has been designed based on local objects, they can also be mass-produced in the form of large print formats which can be displayed on the walls of Bodo medium schools for the everlasting presence in front of the students.

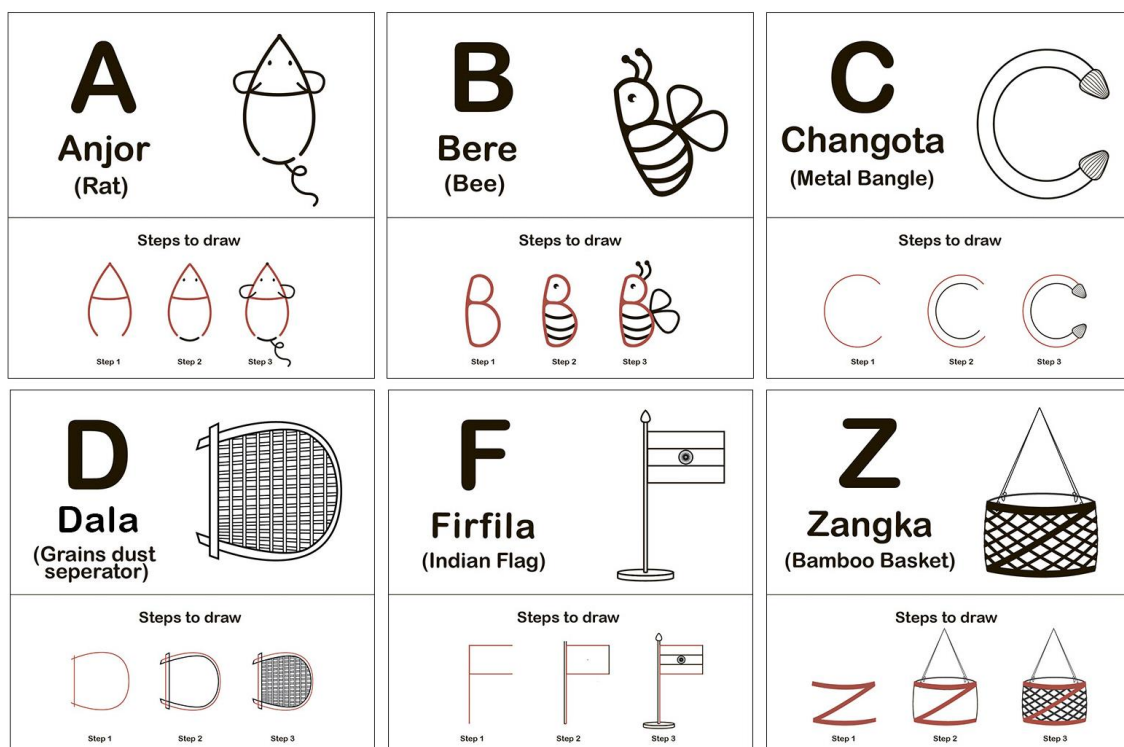


Fig. 12. Pages of the designed booklet

## **6. Discussions**

After the completion of the teaching session, children responded very positively within the context of ease in learning and drawing, recognizing and recalling the objects presented to them, following the steps to develop the semantic expressions and were ready to adapt the evolved learning process enthusiastically. Almost 90% of the students preferred the new teaching methodology over the conventional one.

The quality of the teaching-learning process was appreciated by the teachers and they were also willing to familiarize themselves with the evolved methodology to teach their students. However, for the teachers to follow the new methodology, specialized training might be essential, which can be looked after by the government and other educational organizations in the future.

## **7. Conclusion**

Results obtained by the methodology described are relied on the Semantic expressions to teach Alphabet with the aid of Bodo language demonstrated a very optimistic behaviour in terms of diversified scope for the future expansion and learning. The same methodology can be proposed for many other Indian languages from different parts of India, which will promote the learning of English proficiency skills while maintaining the roots of the mother tongue of a specified region in which the methodology is being promoted and taught.

In the approach offered, the perspective and knowledge of a visual communication designer are combined with that of students and teachers by analyzing the learning-teaching concerns. Further interdisciplinary combined approaches may enable the development of additional methodologies, which can solve other English learning issues for the primary level children of Indian Vernacular medium schools.

## **8. Acknowledgement**

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