

# Lift The Flap Story Book Based Child-Friendly: An Innovative Literature in Primary School Mathematics Learning

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**Abstract.** This paper reviews about lift the flap story book in primary school mathematics learning. Mathematics is one of the subject at primary school. Mathematics contains abstract concepts so that to understanding it needed a media to bridge abstract mathematical material into a concept that can be easily understood by students, especially primary school students grade IV. Because at this level, students are at concrete operational stage so that to learn something that is abstract needs to be given a help in the form of a concrete representation. One of the media that can be used is lift the flap story book. Lift the flap story book is a kind of picture story book designed by presenting an interesting story by integrating the mathematical material in the story. In addition, there are several pages in this book whose papers can be lifted and flapped, ie folds that can be opened and closed in one direction. In this part of the fold contains further explanations of mathematical material that have not been described in the story. This section is intended to attract students' attention and make students curious about the content of this book. Not only that, in the book also there are group activities, exercise questions, games in the form of mathematical puzzles, and glossary is expected to make students active and happy to learn math. With the development of lift the flap story book is expected to add a collection of mathematics literature in primary school.

## INTRODUCTION

Mathematics is one of the lessons learned in primary school. Since the implementation of the 2013 curriculum, mathematical content has been included in thematic learning at all grade levels of primary school. However, based on the 2013 curriculum implementation evaluation in 2016, the mathematics lessons content for grades 4, 5 and 6 are separated from thematic teaching content [1].

Mathematics is important to be studied because it is the basic science of the development of other sciences, such as physics, chemistry, and biology and the development of science and technology. In daily life, there is no field that is not related to mathematics. Everything must be related to mathematics. However, it is very sad when many students consider mathematics is a difficult lesson. The mathematics learning notion is not good because the content consists of abstract material concepts. So it takes a visualization or concreteness of a concept of abstract mathematical material into a concrete material concept so easily understood by students. Therefore, it takes a medium that serves as a messenger of the abstract material concept into a concrete message for the mathematics learning purpose can be maximally achieved.

One effort that can be done is to use instructional media. In accordance with the opinion expressed by Sadiman [2] that the learning media is anything that can be used to distribute messages from the sender of the message to the recipient of the message. In other words, learning media serves to convey a message of the concept of abstract mathematical material to be concrete from the teacher as a message sender to the students as the recipient of the message in the learning process.

Learning media that are widely used in schools is textbooks. Textbooks contain learning materials and activities that support students in the learning process. However, currently, there are many textbooks that have not been in accordance with the characteristics of students, such as the case of primary school textbooks in which there is widespread porn content in the area of Pariaman, West Sumatra. The pornographic content in the book can be seen from material explanations of physical changes in women and men [3]

In order for the well-run learning process, the role of teachers is very important in choosing and determining the appropriate learning media which both the material and the characteristics as well as the students' need. One of the media that can be an option is Lift the Flap Story Book in mathematics learning. The media in the form of pictorial storybooks is designed by presenting an interesting story in mathematics learning. This book helps students in engaging real activities through group activities, exercises questions, and explanations of mathematical material delivered through the story. Moreover, this book has folded pictures so that the pictures can be opened and closed easily by students. Inside the fold contains an explanation of mathematical material so that students easily understand the presented material. In addition, the book is designed in accordance with the characteristics of primary school students who are in the concrete operational stage of development. During this stage, children develop their cognitive abilities by looking at things from a particular point of view and their thinking becomes more logical than ever [4]. Therefore, the development of this book is expected to be useful in mathematics learning in primary schools.

## MATHEMATICS LEARNING

Since mathematics is a component of learning, that in the process of learning itself need to be adjusted to the characteristics in order to create an effective learning. In this case, Gloria [5] conveyed four basic components in mathematics learning. The four basic components in mathematics learning which are needed to be understood by teachers in teaching mathematics, these include: (1) views mathematics as a practice to be done, (2) understand how students learn and organize ideas, (3) has the ability to design and choose the right task for students in the form of problem solving in students' daily life, and (4) has the ability to integrate learning assessment with the learning process in order to fix and improve learning.

Here after Chambers [6] corroborate that mathematics is understood not only for knowledge but also to be practiced so that the mathematics skills that students have learned should be applied in daily life as well. Therefore, the main focus in learning mathematics is "*doing*" namely to make the meaningfulness of learning mathematics can be maximally achieved.

Not only Chambers, Stoilescu [7] describes that learning can serve as a medium for students to understand theories, build knowledge, and direct experience. Kennedy [8] emphasizes that the learning of mathematics will be very effective if there is constructivism in students themselves, students are able to construct their knowledge through meaningful *pengalaman*. Therefore, the teacher should be able to direct the learning of mathematics on the activities that are applicative and problem.

From some opinions above can be synthesized that mathematics learning is a learning that provides opportunities for students to actively perform with mathematical activities that can provide meaningful experiences for students so that students can apply it in daily life.

## PICTURE STORY BOOK

Picture storybook is a type of storybook which uses pictures as the major elements. Pictures on the storybook take a function to adorn and support the story which could help the process of understanding the contents of the book. Through the story pictures, children are expected to easily receive information and description of the story to be conveyed.

In accordance with the opinion of Huck et al [9] which explains that picture books have unique characteristics in the illustration. Children will be pleased to read as the illustrations shown in the book get them interested. The making of a picture book includes several important things including size, shape, selection of paper, pictures, cover page, color, and storyline. In picture books, the script of the story has advantages in storyline, character, theme, setting, the point of view, style, and tone.

Stewig [10] affirmed that picture book is a book containing stories and pictures. Both of these elements work together to produce stories with illustrations of images. Usually, pictorial storybooks are meant to push toward appreciation and love of books. In addition to stories, it must be verbally interesting, the book should contain images that affect the interest of students to read the story. Therefore, the images in the story must be alive and communicative so that the message can be delivered properly.

Mitchell [4] suggested about the purpose of making picture storybook. The purpose of making picture book related to emotion, learning about the world, people, relationship and feelings, entertainment, evoking

imagination, and appreciating beauty. According to that statement, students able to express their emotion as a tool to develop motivations in studying while reading picture books.

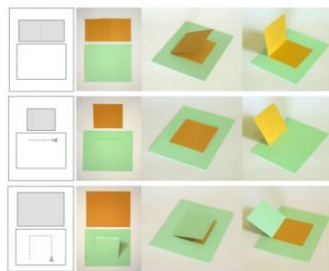
Not only the purpose, Mitchell [4] also outlined some of the functions and importance of picture storybooks for children, including:

1. Helping children develop emotions. Children will feel facilitated and helped to understand and accept themselves and others. Picture storybooks can facilitate children to study the world and make children aware of the existence of the world in the midst of society and nature.
2. Assisting children to learn about relationship and feelings toward others. For instance, through picture story books which show family life, neighborhood, peers, socialize at school, and others which tells the relationships between people can teach children to behave.
3. Picture storybook helps children to obtain happiness, appreciate life, and stimulate the imagination.

## LIFT THE FLAP STORY BOOK

*Lift The Flap Story Book* is a combination of several words in English. *Lift* which means to lift or raise to a higher position or level., *Flap* means to cover, *Story* means tale and *Book* means book. So that *Lift The Flap Story Book* signify a book which has means a storybook that has a cover that can be lifted (opened/closed). *Lift the flap* is packed with compile or stacking some papers, then sealing one side of the paper arrangement and leaving most of the paper to be opened and closed again.

Storybooks have a lot of varieties, one of which *lifts the flap storybook*. Thus, *Lift the Flap Story Book* is a part of *the picture book*. This is supported by the opinion of Nutbrown [11] stated that picture storybooks have illustrations with paper techniques that can be lifted (*lift the flap*). Picture storybooks have a variety of paper techniques tailored to the purpose of a picture storybook like picture (a). One such technique is paper which can be lifted so it attracts the attention of children in reading it. At first *lift the flap* is a technology created from paper material that can be a medium of paramedics to explain how the composition of the human anatomy like picture( b), before the existence of more sophisticated technology as it is today [12] Thus, "*lift the flap*" storybook is a form of new innovation of *lift the flap* which developed from education field by integrating story and material on it to motivate students in learning.



(a)



(b)

Subsequently in 1765, the publisher Robert Sayer producing *lift the flap book* as a medium of entertainment both for children and adults. *Lift the flap* was becoming more and more developed with the distinctive strength that has always been preserved. A simple and friendly mechanic would make lift the flap closer to the children like picture (c). The great benefits, indirectly in viewing activities, are opening and closing pictures on "lift the flap" could train children motor development [12]. From the explanation above we could conclude that the *Lift The Flap Story Book* is a modification of a picture book consisting of text containing information or explanations and images that could be opened and closed.

## CHILD-FRIENDLY

Child-Friendly Learning was learning that emphasizes compassion and respect the rights of the child in learning. Kustawan [13] described the learning activities of child-friendly (friendly learning) was the core of school management. Friendly learning implements learning strategies variety oriented to the student's active learning and student-centered learning.

In accordance with the above opinion, the Government of Indonesia has initiated a policy on Child-Friendly Schools established by the Minister of Women Empowerment and Child Protection (PPPA) Regulation No. 8 of 2014. In the policy, there were 4 indicators of natural content of child-friendly learning, namely, 1) the learning materials content was not gender biased, i.e. respect for fellow students, 2) non-discriminative, that did not

discriminate the child's condition, for example, CSN child with normal child, 3) provide a fair, accurate, informative picture of local communities and cultures, 4) contains material on Convention on the Rights of the Child (CRC) [14]

Thus it could be concluded that child-friendly learning was a child-centered learning process and upholds the rights of children as students in learning.

## LIFT THE FLAP STORY BOOK IN PRIMARY SCHOOL MATHEMATICS LEARNING

Lift the flap storybook was a type of book that uses lifting techniques such as window forms that could be opened or closed, and accompanied by stories that contain meaning in accordance with the picture. The development purpose of Lift the flap storybook for children's attention by highlighting of the selection includes images, colors, and writing, as well as an attractive design so that children eager to read and perform reading activities. Reading activities can deliver messages that can construct cognitive aspects in children.

Reading activities can deliver messages that can construct cognitive aspects in children. This is in line with the implementation of child-friendly based learning is being applied in Indonesia. The National Education System has been regulated by Law No. 20 of 2003 Article 29 paragraph 1 which emphasizes that the education received by the child should have a purpose to develop the potential that exists within the child. That potential includes personality, talents, mental and physical abilities of children [15]. In addition to the potential, the attitudes development that goes into the affective domain must also be accepted by children who follow educational programs implemented in Indonesia. These include self-confident attitude, mutual tolerance, accountable, gender equality, and so forth. With the development of children through education will create a comfortable environment in school without any discrimination or less comfortable circumstances for children.

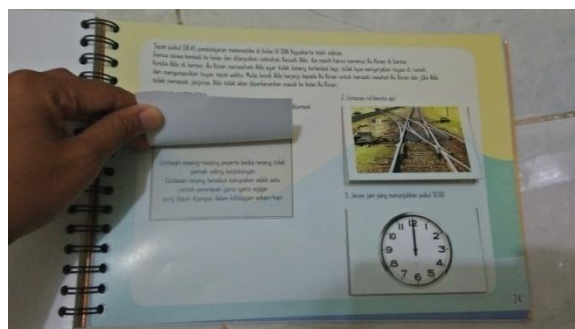
In line with the law above, to develop the potential in children in the school should be applied the friendly learning (child-friendly learning). Kustawan [13] stated that the learning activities are child-friendly (friendly learning) is the core of the school management. Therefore, all learning support activities are directed to the creation of an active, innovative, creative, effective, and enjoyable learning environment (PAIKEM/ALICE). Child-friendly learning implements various learning strategies that are active learning oriented and student-centered learning.

Innovative learning can be applied in the class one of them by choosing a book that suits the child's development. The *Lift the flap* storybook is one of a kind of innovative book that suits children's development and can help children improve their cognitive and affective abilities.

Child-friendly content in the *lift the flap* storybook that is child-friendly based can be found in the interaction between characters in the story. The child-friendly study refers to Indonesia's Minister of Women's Empowerment and Child Protection (PPPA) Regulation No. 8 of 2014 on Child-Friendly School Policy. The child-friendly content developed in the *lift the flap* story book as follows: a) Non-discrimination, which ensures every student's opportunity to enjoy the right to education without discrimination based on disability, gender, ethnicity, religion, and parental background, b) Anti-violence or prohibition against violence (bullying) between teachers and students as well as between students, c) Prohibition of degrading students' dignity such as insulting, mocking, and hurting the feelings also self-esteem of fellow students, d) Enforcement of non-violent discipline such as replacing punishment by providing academic assignments or additional skills, e) Emphasis on the importance of education and prevention of drop out students, f) Integrating environmental materials in the learning process such as the importance of waste disposing in its place [14]. And the mathematical content can be known from the material presented in this child-friendly *lift the flap* storybook.



(d)



(e)

So the child-friendly *lift the flap* storybook in mathematics learning is an illustrated book in which there are stories and mathematical material used to develop cognitive and affective abilities in children who act as students in learning like picture (d) and (e) above.

## CONCLUSION

From the above explanation, it can be concluded that lift the flap story book based child friendly is one of the kind of picture story books developed in education. So, this book not only contains stories but also integrates mathematical material in them so that students can be interested in learning math. In addition, this book development is tailored to the characteristics of children who love stories with many pictures and activities contained in this book focusing on the activity of students in learning.

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