Community Empowerment through Educational Media for Early Learners in Ex-red Light District

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Abstract: The Kapuas School (Sekolah Kapuas) in Putat Jaya, Surabaya, has a strong potential to develop and provide alternative education for needy people in ex-red light district formerly known bas Dolly. With the number of 60 students, the facilities owned are unable to serve their learning needs. In addition, students find it difficult to understand the lessons taught in the classroom, due to the methods and media used in the learning process that still using conventional and makeshift systems. Even though this school is for economically poor children, the education quality should be as close as formal school in general, namely the equality of basic learning media. Community empowerment in Dolly, trough the education for children, must be done. The use of conventional media such as book is still a favorite of teachers as a means of delivering material, but can cause those students feel unmotivated to learn. Therefore, the need for an interactive learning media that can stimulate students to learn and can be effective for many audiences is risen. In education, the use of interactive learning media has been widely used. Hopefully that this media will be able to meet the needs of the Kapuas school, improving the quality of teaching and learning process, and learning outcomes in general.

1   INTRODUCTION

The Kapuas alternative school is a free school for underprivileged children in Putat Jaya village, Dolly. The school founded by Khoiriyah, a local resident from Dolly neighbour who saw that many kids in her area who do not get the opportunity to go to school. She then make her residence a place to replace school. With various efforts this school began with independent costs in 2004, until now it has 100 students aged 5 to 12 years. The education provided is reading, writing, arithmetic, Islamic religious education such as reciting (TPQ), and creative education for students. The Kapuas School currently has six teachers, and is managed based on financial assistance from donors. In 2016 the school received assistance for building small library and minor building refinement, where the school has a school building with 3 floors. Every year the number of school dropouts in the Putat Jaya area is increasing, but due to the limitations, students are given training in science with makeshift learning media according to their contributions.

Kapuas schools need social design to bridge the learning facilities that they have obtained with the increasing number of students. This effectiveness is needed to help their learning. Social design is a design approach for the benefit of the society, not the interest of creating something new, but rather to improve things that are urgent and necessary, or improve the existing systems. Social design is essentially a way to improve people's welfare through design outcomes.

The use of media has an important role in the learning process in this alternative school, because learning media can act as a tool that helps convey messages to students more effective. Learning media itself is a resource that students can take great advantages of. In general, learning media has a purpose to clarify the delivery of messages so that they are not always verbal and able to overcome the limitations of space, time, and sense power, just as objects that are too large can be substituted with images or models, expanded ideas can be accessed easily in representative images. This can be applied to educational-based interactive learning media (edutoys). Edu-toys are educational toys for children's development, so children can learn while

playing. Edu-toys actually a fun but effective way of learning especially for children.

Figure 1: Condition of the Kapuas alternative school in Putat Jaya Village

Figure 2: The atmosphere of the Kapuas alternative school in Putat Jaya Village

The Kapuas school rely on books from the library as it main learning tool. With the number of students reaching 100 pupils today, the facility is unable to meet student's learning needs. In addition, students have difficulty learning in class, due to the methods and media used in the learning process using conventional and temporary systems. From the above considerations, this research plan to create certain learning media that can accommodate a large number of students, interactive yet more easily understood for children. There are going to be two medias designed to suit their curriculums.

Based on the background described above, the main problem formulated in this study, is how to design learning media for Kapuas schools as disadvantaged schools in the region affected by the selection of Dolly localization?.

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2 METHODS AND LITERATURE STUDY

2.1 Strategy

- Data collection and preliminary studies (Condition of the Kapuas alternative school).
- Analysis of other existing non-profit schools.
- Strategic observation and interviews with shareholders, such as in-depth interviews with alternative schools.
- Library studies that study with learning media specifically for interactive learning media
- Media design methods and processes
- Content
- Design concepts and design alternatives
- Initial design and analysis
- Design implementation
- Prototype
- Prototype evaluation

2.2 Activity Plan

- Collecting data about the alternative schools of Kapuas, Putat Jaya Village
- Interviews with speakers, students, surrounding communities, Putat Jaya Village as protectors
- Comparative study of other alternative school learning media
- Mapping potential and design concepts.
- Data analysis
- Start planning, designing, developing designs and implementing the required media.
- Design implementation
- Evaluation
- Conclusion

2.3 Learning Media

Learning media is a tool that is used by teachers so that learning activities take place effectively. Sadiman (2012) Media is anything that can be used to channel messages from senders to recipients so that they can stimulate students' thoughts, feelings, concerns and interests and concerns in such a way that the learning process takes place. According to Briggs (in Sadiman 2012) argues that media are all physical tools that can present messages and stimulate students to learn. Based on some of the opinions of the experts above, the researchers concluded that learning media is a tool used by teachers to support the success of the

learning process and stimulate students to be passionate about learning.

2.4 Types of Learning Media

Media includes all learning resources needed by students to increase student activity in the learning process. Learning media have many types, which can be used according to the needs of the teacher and are needed when learning activities take place. Rudi & Breatz (in Trianto 2010: 201) classifies media into seven components of the media, namely: a) audio visual motion media, b) silent audio visual media, c) semi-motion audio media, d) visual motion media, e) visual media silent, f) audio media, and g) print media.

Based on the opinions of the experts above, the researchers concluded that the types of media that can be applied in learning in the classroom are very diverse. The teacher can use the media according to his needs. In this case the researcher uses visual media that is devoted to graphic media in the cooperative model of thinking think pair share. Because graphic media are considered able to activate student learning activities in thematic learning

2.5 Eksisting

Figure 3: Studi Eksisting (a) Marbel Flashcard, (b) Watermelon Math Center, (c) Pizza Preschool Counting Activity

The following are products that support numbers recognition and counting activities for children, which consist of Marbel Flashcard, Pizza Preschool Counting Activity, and Watermelon Math Center. Marbel Flashcard is one of the developers of interactive media for children in Indonesia, one of which is the flashcard media. Like a flashcard in general, Marbel Flashcard displays the numbers and the supporting images behind them. Visuals on the card are presented in cartoon form with colorfull color tones made with vector techniques. Marbel Flashcard is mass produced by printing.

While the other two are more directed at handmade and the presentation is made simpler. In Pizza Preschool Counting Activity and Watermelon Math Center, the interactive impression is more pronounced. Children as users can carry out motor and cognitive activities when matching objects with other objects.

3 DISCUSSION

3.1 Design Concept Media Calculates the Panka

Based on the results of interviews, literature studies, and previous media studies, the learning media made by designers as a form of designer responsibility is in the form of educational games (edutoys) by raising basic numerical material for paud children. Edutoys counting is not only a media that can help paud educators in delivering numeric material to children, but also creates interaction between educators and their students. In addition, sticking activities are one form of children's motor activities that can be added to the edutoys.

Communication objectives.
- creating board games: edutoys for pre-school children using materials and techniques that are more concise and easy to use.
- creating edutoys board for paud children involving their cognitive and motoric sensors.
- providing educational calculating material for paud students through board games: edutoys, so learning becomes fun.
- growing interaction between teaching staff and paud students.

Verbal Strategy

The language used in supporting this media is by using informal language, because the intended target is that children will more easily absorb information by using non-formal language to be relaxed and friendly.

Visual Strategy Color

Mood that wants to be aimed at this game media, leads to colorful colors and nuances in order to increase children's power. Because colorful combination colors are very related to children games. The combination of elements is supported by graphic elements of objects depicted by vector techniques.

Figure 4 : Creative Color Scheme: Colorfull

Visual Strategy Typesetting

Fonts that are suitable for children's characteristics are fonts that have a form of handwriting. This type of font has the impression of being flexible, dynamic, fun, and funny. The font category used is fancy cartoon. The typeface used is Chubby Gothic (for titles and taglines) and Folk-Heavy (for numbers).

Magnetic Board for Learning Numbers

Figure 5 : edutoys: PANKA – Si Papan Angka

Figure 6 : Magnet design

Material and Media:

1. The Leaderboard uses rectangular formations horizontally. The board is made of yellow board, which is coated with bontax stickers that contain visual figures. Behind the layer there is a magnetic plate as a magnetic base, where the Circle Magnetic Stickers are attached

2. Magnetic Stickers Circles made from efafoam (ati foam) are cut in a circle and above them are bontax stickers containing different amounts of objects. Behind the efafoam, a magnet is attached.

Game Technique

Learners count the number of objects on a Circle Magnetic Sticker. Students attach it to the board on the side that shows the number that is equal to the number of objects on the Circle Magnetic Sticker.

Mascot Design

A game media needs a mascot so the game looks more interactive. Dogs are chosen as mascots because dogs are one of the animals that are good at counting.

Figure 7 : maskot edutoys: PANKA – Si Papan Angka

Desain Logo

Figure 8: Edutoys logo : PANKA – Si Papan Angka.

3.2 Design Concept Interactive Book "ALKISAH"

Based on the results of interviews with stakeholder, children in Kapuas schools need religious education media that can help educators to deliver religious-themed to students with content that is in accordance with the target so as to create interaction between educators and their students through the concept of interactive. This illustrated book was made to increase children's interest in the Kapuas school to learn more about religion, especially the story of the Prophet.

Visual strategy
These stories show the greatness of Allah SWT. The page will be made with layers of flip-flop systems with square specifications with a size of 21 cm x 21 cm. Visuals from books use pastel colors and formations which are partially implemented from the moodboard that has been compiled.

Story Development Story criteria:
1. Stories contain elements in the verses of the Al-Qur'an
2. Stories contain elements that can educate and motivate children
3. The story does not contain violence

Prophet Sulaiman and Bird Hud-Hud written in Surat An-Naml (20-44). In the Letter it is told about Prophet Solomon with all the might and advantages given by Allah SWT. Prophet Solomon was a great king, now the kingdom is located in the land of Palestine. Until now, Israeli Jews are still searching for where the palace (Solomon Temple) is located, and they believe that the palace is located on the land where the Al-Aqsa Mosque is now. This is the reason why the Jews wanted to tear down the Al-Aqsa Mosque and reconstruct the site of Solomon's palace.

Visual Concept

Figure 9: keyword

Figure 10 : Color and environtment

Figure 11: Illustration

Name Once taken from the Arabic base "Al-Qishah" which means "story". The design concept for the logo Once it was made with Arabic nuances with Hijaiyah letter elements through the letters while still having the theme of children

Figure 12 : Logo design "Al-Kisah"

Figure 13 : Cover design

Trianto. 2010. *Mengembangkan Model Pembelajaran Tematik.* Jakarta: PT Prestasi Pustaka
https://id.pinterest.com/pin/681028774878196271/?lp=tre
https://www.childcareland.com/home/watermelon-math-center.

4 CONCLUSIONS

The Kapuas School has limited learning media facilities. With the number of students reaching 100 students, these facilities are unable to serve the most learning needs of students. In addition, students find it difficult to understand learning in the classroom, due to the methods and media used in the learning process using conventional and temporary systems. Through interactive learning media based on educational games (edutoys) about the introduction of numbers and counting and memorizing Hijaiyah readings and the story of the Prophet, it is expected to help resolve problems in the Kapuas school. Edutoys are educational toys for children's development, so children can learn while playing. Some edutoys are designed in such a way to provide pleasure for the children, while accommodate the development and overcoming the child's passivity because this medium allow children to interact directly. Furthermore, the use of this media as a new learning approach media in the Kapuas school will enhance the credibility of the Kapuas school as one of the alternative school for underprivileged children in ex-red light district area, because all children have equal right to education in order to improve the quality of their future.

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