

Development of Alphabetic Cards as a learning medium for the Community Learning Activity Center community

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Abstract

The development of the Out-of-School Education sector has a strategic role in improving the quality of human resources. Learning media in alphabet cards is needed to increase students' motivation and learning achievement in reading learning, which are used as a learning resource to develop learning models while playing for students. This research aims to determine and test the effectiveness of implementing the development of the learning process for reading while playing through alphabet card learning media for residents learning literacy in PKBM North Sulawesi Province. This research uses the "Research and Development" method, following the research stages of developing the ADDIE model (Analyze, Design, Develop, Implement, and Evaluate) in 4 districts: 1). Bolaang Mongondow South, 2). East Bolaang Mongondow, 3). Talaud Islands, and 4). North Minahasa. This research was designed for two years, and in the first year, 2022, it was carried out in 3 stages: 1). Analysis Stage, 2). Design stage, and 3). Development Stage. Meanwhile, two stages were carried out for the second year, namely the Implementation and Evaluation stages. It can be concluded that the learning process is effective because students who were previously literate but forgot the letters have learned them again. There is an increase in students' cognitive abilities, better ability to arrange letters to form meaningful words, and students' learning becoming more involved.

Keywords

Learning to Read while Playing Alphabet Cards

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1. INTRODUCTION

The growth of the Out-of-School Education sector plays an important role in improving the quality of human resources by STKIP Siliwang Bandung. The government has made various efforts to equalize education for the community, especially through the Out-of-School Education Literacy program at the Learning Activity Center (Spectrum Non-Formal Education Journal). These students are generally adults and tend to have difficulty reading. Various learning methods and strategies have been applied to learning resources but have not been able to make students able to read well. Learning media in alphabet cards, which are used as learning resources to develop learning models while playing, are needed to increase motivation and reading achievement for students.

The Community Learning Activity Center (PKBM) as a forum for out-of-school education for the community existed long before the government established the national education system. (Wullur, 2019). It is stated this way because community educational institutions exist along with the growth and development of local community civilization. These institutions usually take refuge in religious institutions, such as Islamic boarding schools, Sunday schools, Sabbath schools, and similar institutions, which ultimately become official schools rooted in religion. Likewise, the Ministry of Education and Culture pioneered the Learning Activity Center, established with Law Number 2 of 1979 concerning the National Education System and then refined with Law Number 20 of 2003 concerning the National Education System. (Ibrahim et al., 2022) The Community Learning Activity Center (PKBM) is a learning center created from, by, and for the community to increase its knowledge, insight, skills, attitudes, interests, and abilities. Therefore, several institutions in society serve as a forum for learning activities for the general public, including art studios, cultural learning centers, village libraries, and the like. Philosophically, the emergence of learning activity studios is implementing community-based education without limits in learning (Botkin J. Wet. all 1984). According to the new educational paradigm, education is not just a matter of formal educational institutions such as schools but also a matter of society (Brookfield, Stephen, 1983). Schools are not only defined as official educational institutions but can also be found in the home environment and surrounding communities. According to the definition of a learning society, it actively investigates experiences in all aspects of its life (Wullur, 2019). Individuals intentionally engage in independent learning activities. This is achieved by various methods, including listening to radio and television broadcasts and reading newspapers, magazines, books, and pamphlets (Wullur'2018). The most basic idea of learning is awareness and complete awareness that is internalized to seek and obtain information, insight, skills, and perspectives on life from anywhere and from anyone, regardless of the time and place of learning. This understanding is known as learning without understanding time limits (no limit to learning), and the presence of PKBM in the community is expected to foster the perception that community-based learning delivers learning material that meets the demands of the local community and society (Rahmat, 2018). The meaning of community-based education (Learning-based society) will emerge when the curriculum and learning materials are determined and implemented by the community (Knowles, 2019). People tend to learn with a traditional mindset during the learning process, so students should be introduced to innovative learning, which is realized through anticipatory learning and participatory learning (Wullur, 2021). Therefore, the learning method uses learning strategies based on adult learning patterns.

Therefore, mapping access to educational services in literacy communities for learning residents in PKBM North Sulawesi Province requires a unique strategic approach that combines learning and playing. This learning strategy is very new and was developed through an action research process that follows the stages of relevant scientific research procedures (Arbarini et al., 2022). This research aims to determine and test the effectiveness of implementing the development of the learning process for reading while playing through alphabet card learning media among residents learning literacy in PKBM North Sulawesi Province.

2. METHODS

This research uses the "Research and Development" method, following the research stages of developing the ADDIE model (Analyze, Design, Develop, Implement, and Evaluate) in 4 districts: 1). South Bolaang Mongondow, 2). East Bolaang Mongondow, 3). Talaud Islands, and 4). North Minahasa. This research was designed for two years, and in the first year, 2022, it was carried out in 3 stages: 1) the Analysis Stage, 2) the Design Stage, and 3) the Development Stage. Meanwhile, two stages were carried out for the second year, namely the Implementation and Evaluation stages. The stages of the research process are explained as follows;

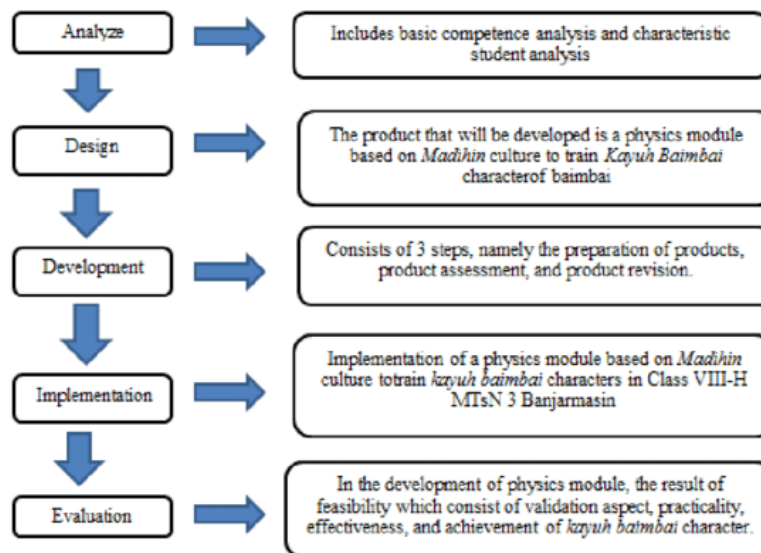


Figure 1. Development Steps Using the ADDIE Model

Source:(Richey, 2001)

3. FINDINGS AND DISCUSSIONS

The research results were designed using the ADDIE Model steps (Analysis, Design, Development, Implementation, Evaluation). The following explains each step researchers have carried out over two years: 1) the Analysis Phase, 2) the Design Phase, and 3) the Development Phase. Meanwhile, two stages were carried out for the second year, namely the Implementation and Evaluation stages.

- a. **First Stage, Analyze**(Needs Analysis), researchers carry out needs analysis based on data in the field, including;
 - 1) To achieve learning goals through developing alphabetic cards, including increasing literacy, language understanding, or spelling skills.
 - 2) The need to improve reading and writing skills in the PKBM program
 - 3) The need for various learning media, for example, alphabetic cards, is appropriate to the available resources.

b. Design

Initial Product Design (Images and Explanations)

The initial design of the Alphabet Card Learning Media product was designed for letters A to Z as follows:



Alphabet Card Learning Media has two sides: 1) the front side and 2) the back side. The front side has the letters A to Z in the middle, with pictures of children and fruit as symbols of Out-of-School Education objects in the top left and bottom right corners. The Alphabet Card Learning Media size is 8.5 cm long and 6.5 cm wide. This paper is made of cardboard and has a white backing on the front and back. Alphabet Card Learning Media is grouped in one package consisting of four letters of the alphabet

from A to Z. One package consists of four letters of the alphabet from A to Z. Alphabet Card Learning Media is black and red. The image attached to the alphabet letter card learning media (1) is a picture of a child and a fruit. The picture accompanying the alphabet letter card learning media (2) is a picture of a farmer in the garden. Alphabet letter card learning media (3) is equipped with pictures of a fisherman and a rower. Alphabet letter card learning media (4) accompanied by a picture of a farmer carrying a shovel. On the back is a white backdrop with the words "Let's Learn While Playing Together" FIP Unima Out-of-School Education. Above the text, there are two pictures, one with the Tut Wuri Handayani Kemendikbud logo and the other with the Manado State University logo, as well as a picture of the center of the learning community and tutors, and the bottom right corner says MMW, which is an abbreviation of the inventor's name. Markus Mozes Wullur

c. Development

Initial Product Trial of Alphabet Card Learning Media (Phase I)

The findings from the three research groups, each of which had five games, resulted in several notes of suggestions, which were reviewed in the FGD as follows:

- 1) Because the backdrop is white, students have difficulty distinguishing and sorting which cards are the front and which are the back. It is recommended that the front card background should not be the same as the card background.
- 2) Residents found it difficult to arrange alphabet cards because the letters were in the middle of the cards, and were distracted by the pictures accompanying the alphabet cards. To avoid disruption to the layout of the cards, it is recommended that the letters of the alphabet cards be placed in the upper left corner of the inside of the alphabet cards and the accompanying images printed in the center, in the player's control.
- 3) Alphabet cards are too thin and difficult to distribute, so it takes longer to distribute the cards, and the printing of the alphabet letters has the potential to be damaged if exposed to light or water, causing the color of the letters on the alphabet cards to fade. It is recommended that alphabet cards be printed on thick paper or laminated printing paper so that they are neater and the colored images are not damaged by sweat or water.

d. Implementation

Alphabet Card Learning Media Design Validation Process

After going through a limited trial process, design analysis through Focus Group Discussion (FGD), and a process of validating the initial design of the alphabet card learning media, the process of validating the initial design of the alphabet card learning media was carried out through a game limited to one group learning while playing to find out design limitations. The beginning of the alphabet card learning media product with the following game mechanism:



Explanation of Game Design Revisions and Technical Instructions

Alphabet Card Learning Media has two sides, one at the front and one at the back. The front side displays the letters of the alphabet, A to Z, in the middle, with pictures of children and fruit as symbols of out-of-school education materials in the top left and bottom right corners. Alphabet Card Learning Media measures 8.5 cm long and 6.5 cm wide. This paper is made from cardboard and has a white backing on the front and back. Alphabet Card Learning Media is grouped in one package containing four letters of the alphabet from A to Z. One package contains four letters of the alphabet from A to Z. Alphabet Card Learning Media are black and red. The accompanying image for the alphabet card learning media is a picture of a child and a fruit. The front of the card is white, and the back has a green background that says "Let's Learn While Playing Together with FIP Unima Out-of-School Education," with the writing upside down and the bottom not reversed so that the card position can be read in all card positions. Above the text are two pictures, one with the Tut Wuri Handayani Ministry of Education and Culture logo, the other with the Manado State University logo with a picture of the learning community and tutors, and in the bottom right corner., written MMW is an abbreviation of the inventor's name, Mozes Markus Wullur. Alphabet card graphics are laminated to prevent wrinkling and keep the image color from sweat or water.

Alphabet Card Game Technical Explanation

The alphabet cards are divided into letters A to Z. Each package contains four parts of the alphabet, starting from A to Z. This game uses two packs of alphabet cards, so there are eight letter A cards and eight-letter Z alphabet cards. During play, study groups may not consist of more than 5 (five) people. The two packs of alphabet cards are mixed evenly and distributed to each study group member. Each student is given one alphabet card in turn, so there are nine alphabet cards, and each study group member is given five alphabet cards so that the alphabet cards can be held and arranged easily. The game starts with the group member who receives the tenth letter of the alphabet. Before the distribution of the alphabet cards, it is decided that the important letters will be arranged, which will be the goal of the game (for example, the name of each member of the playing group, the name of the animal, the name of the plant, the name of the fish and the like agreed upon before the game starts). After receiving the alphabet cards, each one places them in the agreed order of the letters of the alphabet. The study group member who receives the tenth card first discards one card to his right for a card in his hand that is deemed unnecessary.

The member of the right side of the study group who discarded the first card can choose and consider whether the previous player discarded the card. If the letter on the card matches the required letter, the card is taken, and the excess cards are discarded. If the previously discarded cards are no longer needed, the person concerned can choose one card from the set of cards in the center, discard the redundant cards to his right, and so on clockwise. If the alphabet cards are arranged according to the agreed arrangement of the letters of the alphabet cards, then the game is declared finished, and the game is for the victory of the group member who succeeds in arranging meaningful alphabet cards. There are still several other cards that are not arranged in a meaningful way. Suppose the card arrangement according to the alphabet shows that it has not been arranged, but the cards drawn in the middle have been completely removed. In that case, all the discarded cards are collected and shuffled before being placed in the middle to continue the game by drawing out the cards. The next member of the playing group to the last discards his card. If the draw cards run out for the second time, but the important cards have not been sorted, all the cards in hand and discarded cards are shuffled again, and the game is determined to continue without a winner.

Evaluation

The following are the stages of implementing the development of the learning process for students to read while playing with alphabet card learning media: Recruit teachers at each PKBMS at the research location. In each PKBM, tutors recruit potential residents to learn literacy and form study groups, each consisting of 5 (five) people and a maximum of five study groups. Organizing Training of Trainers (TOT) for tutors to study the prototype of the alphabet card learning media and the technicalities of the alphabet card learning media game by utilizing the Learning Implementation Plan (RPP) that has been determined. Trials of developing a reading learning process while playing with alphabet card learning media for students in the form of study groups by the research team in assisting tutors in each PKBM at the research location need to be carried out.

Discussion

Alphabet card learning material was developed as game card graphics containing alphabet letters from A to Z. This alphabet letter design for children uses capital letters with the Fond text Bookman Old Style Fond font size 199 with edges and shadows on letters. Hence, they are easy to read both with and without glasses. The letters of the alphabet are then divided into black and red groups to make it easier and more fun for children to learn to make cards while playing. (Wang et al., 2021)

The alphabet card learning media is designed with a length of 8.5 cm and a width of 5.5 cm, with a white front base color and a green background color. The study population is in the center of the card, while the photos next to the circle are of young children and fruit, fishermen with paddles, and farmers

with shovels.(Dunlosky et al., 2013). The letters of the alphabet and their images are arranged in two positions, face up and face down, aiming for the cards to appear in the right position. Letters of the alphabet so students can read and not get confused. Likewise, the front and back colors of the alphabet cards are also different; the front and the base are white. The back view of Green's alphabet cards will also help residents learn to arrange alphabet cards when learning to read while playing. (Le et al., 2020). After the image of the alphabet card learning media product has been created, the process of printing the alphabet card learning media is laminated to facilitate the game process, which begins with the process of shuffling the cards, the process of distributing the cards, the process of drawing the image cards in the middle. table and the card arranging process becomes lighter, smoother, and has a higher level of precision. Because the alphabet card learning media has been laminated, the color of the images and letters on both the front and back of the cards will not be easily damaged due to splashes of water or sweat when played or not played. On the other hand, this letter card learning material will not wrinkle or become damaged quickly. Therefore, each alphabet card learning media package is carefully placed in the prepared alphabet card learning media card box. The display form of the alphabet card learning media design that is clearer, more complete, and easier to understand is ready to be evaluated after repeated socialization, inspection, and evaluation of the image display of the alphabet card learning media.(Kovács, N., Rosková, E., and Lajunen, 2014). Development of the reading learning process using alphabet card learning media for learning citizens

The researcher carried out procedures when the prototype of the alphabet card learning media product had been produced and printed and was ready to be tested, including creating a field data collection team consisting of lecturers and students for each research location. The process of learning to read while playing with letter cards was tested by this team, which began with an explanation and technical socialization of the game by the Chair and members of the learning team. The field data collection team left for research locations in South Bolaang Mongondow, East Bolaang Mongondow, Talaud Islands, and North Minahasa after the entire field data collection team knew, understood, and mastered the process of learning to read while playing using alphabet cards as Instructional Media. The task of the field data collection team at the research location is to recruit tutors at each PKBM and SKB that implement the Literacy program to conduct Training of Trainers (TOT) regarding the development of the learning process for reading while playing alphabet cards through media at the research location. Each tutor will hold a study group for residents to learn literacy, with five members in each group to make the learning process easier by applying the growth of the learning process to reading while playing alphabet cards at the research location (Yaelasari & Yuni Astuti, 2022). The research team tested the alphabet card learning media through learning to read while playing with residents to learn literacy at the location after forming a learning community group, using a Learning Implementation Plan (RPP) that had been prepared in coordination with the Department. Chair of PKBM and tutors at each research location. Study. The following is the Learning Implementation Plan (RPP) (Katundi et al., 2009).

The efficacy of using the learning process of reading while playing alphabet cards is produced for learning citizens. After conducting field trials and reviewing them with a team of researchers, tutors, and a team of experts in a Focused Group Discussion (FGD), it was discovered that the effectiveness of implementing the learning process to read while playing using alphabet card learning media. It is effective with the indicator that students who were previously illiterate (forgot letters) now know letters again.(Lim & Guling, 2019). Students' thinking skills improve by choosing letters meaningfully according to the choice of each object based on its theme. There is an increase in skills in choosing alternative letter sequences that refer to choices of objects from the agreed theme. Example: Agreed theme Animal/Animal Name: Choice of objects from the theme include Buffalo, Cow, Horse, Goat, and the like. Residents learn to string the letters of the alphabet into meaningful letters in one syllable, such as the words Buffalo, Cow, Horse, Goat, and the like. (Hoeffler, Steve, and Keller, 2013). Citizens' participation in learning is quite high because the learning process is carried out while playing, without them realizing that the learning materials are designed to teach them to recognize letters and read and

arrange letters into meaningful syllables using the Andragogy learning approach (Adult Education Approach, by Malcolm S. Knowles, in 2019). On the one hand, this alphabet card learning media is an excellent learning technique for people learning literacy at PKBM. Still, it can also be a learning medium for external education activities. Schools in general and this alphabet card learning media in particular can be used as a learning media in formal educational institutions, community groups, and families. (Rahmat, Abdul, & Husain, 2009)

4. CONCLUSION

The prototype product design for Alphabet Card Learning Media can be known, understood, comprehended, and mastered by students in the learning process while playing with several improvements towards improving the images and writing on the part or back of the alphabet card learning media by removing the symbol of the Ministry of Education and Culture and UNIMA symbol for Product Patents and IPR purposes.

The implementation of the process of learning to read while playing with the alphabet card learning media created for students is considered successful, with markers of success such as: 1) Students who were previously illiterate (forgot letters) now know letters again; 2) Students' thinking skills are improved by choosing letters to increase their ability to choose alternative letters that match the choices of objects from the agreed subject. Example: Agreed topic Animal/Animal Name: The objects of this topic include Buffalo, Cow, Horse, Goat, and others. Residents learn to combine the letters of the alphabet to form meaningful words, such as Buffalo, Cow, Horse, Goat, and so on. 3). Learning residents participate actively because the learning process is carried out while playing, without realizing that the learning material was created to learn to recognize letters, read, and combine letters into meaningful syllables using Andragogy learning techniques (Adult Education Approach).

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