



Research Article

The Use of Alphabet Flash Cards Learning Media in the Process of Learning While Playing at the Community Learning Activity Center in North Sulawesi Province

Mozes Markus Wullur, Marien Pinontoan, Ronny G. Dumanaw, Abdul Rahmat

Universitas Negeri Gorontalo

ORCID

Mozes Markus Wullur: https://orcid.org/0000-0002-1681-4450

Abstract.

The development of the out-of-school education sector has a strategic role in improving the quality of human resources. In order to increase motivation and learning achievement of citizens learning to read, learning media is needed in the form of alphabet cards that are used by learning resources to develop learning models while playing for learning citizens. The purpose of this research is to: 1) design alphabet card learning media in the application of the development of the learning process, 2) applying the development of the learning process, and 3) finding the effectiveness of the implementation of the development of the learning process of reading while playing through the learning media of alphabet cards for citizens learning literacy in PKBM, North Sulawesi Province. This study has used the "research and development" method, following the stages of ADDIE model development research (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 is designed for 2 years and the first year, 2022, has been carried out in 3 stages, namely: 1) analyze stage, 2) design stage, and 3) development stage. Meanwhile, for the second year, there will be 2 stages, the implementation stage and the evaluation stage. It was concluded that: 1) prototype product design of Alphabet Card Learning Media can be understood and mastered by learning citizens; 2) the application of the development of the learning process is carried out through stages: (1) Recruitment of tutors, learning residents, and forming study groups; (2) Conducting training of trainers (TOT) for tutors; and (3) trials development; 3. The learning process is effective because: (1) The learning residents who were formerly literate but forgot their letters have re-learned them. (2) An improvement in the cognitive abilities of learning citizens; (3) A better ability to put letters together to form meaningful words; (4). Citizens who are learning become more involved. It is suggested that: 1) The teacher must develop an adaptable lesson plan; 2) The following aspects require revision: (1) the physical card alphabet's size in both height and width; (2). For the sake of IPR and patent rights, a unique logo is required. 3). At the implementation and evaluation stage, this study must be continued.

Keywords: learning to read, while playing, alphabet cards

Corresponding Author: Mozes
Markus Wullur; email:
abdulrahmat@ung.ac.id

Published 26 May 2023

Publishing services provided by Knowledge E

© Mozes Markus Wullur et al. This article is distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use

and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICASI Conference Committee.

□ OPEN ACCESS



1. Introduction

The growth of the Out of School Education sector plays a critical role in boosting human resource quality. Various efforts have been made by the government for equal distribution of education for the community, especially through the Out-of-school Education Literacy program at the Learning Activity Center. These Learning Citizens are generally adults and tend to have difficulty reading. Various learning methods and strategies have been applied by learning resources but have not been able to make learning citizens able to read properly. Learning media in the form of alphabet cards, which are utilized by learning resources to construct learning models while playing for learning citizens, are required to boost motivation and achievement in learning to read for learning citizens. The following are the research problems: 1) How is the design of the alphabet card learning media in the application of the development of the reading learning process while playing for residents learning literacy Out of School Education in PKBM North Sulawesi Province? 2) How is the growth of the reading learning process for people learning literacy implemented? 3). How effective is the implementation of the development of the learning process of reading while playing through the learning media of alphabet cards for the learning community?

2. Literature review

The Community Learning Activity Center (PKBM) as a forum for out-of-school education for the community has actually existed long before the establishment of the national education system by the government. (Wullur, 2010). It is stated thus because community educational institutions exist in tandem with the growth and development of local community civilisation. These institutions typically seek refuge in religious institutions, such as Islamic boarding schools, Sunday schools, Sabbath schools, and similar institutions that ultimately be- came official schools with religious roots. Similarly, the Ministry of Education and Culture pioneered the Learning Activity Center, which was established by Law Number 2 of 1979 about the National Education System and later enhanced by Law Number 20 of 2003 concerning the National Education System. The Community Learning Activity Center (PKBM) is a learning center that was created from, by, and for the community in order to increase the community's knowledge, insight, skills, attitudes, interests, and abilities. As a result, there are several institutions in the community



that serve as hubs for learning activities for the general public, including art galleries, cultural learning centers, village libraries, and the like. Philosophically, the emergence of these learning activity studios is an implementation of the concept of community-based education (Learning based community). According to the new educational paradigm, education is not just an issue for formal educational institutions such as schools, but it is also a problem for society as a whole. Schools are not just defined as official educational institutions, but they may also be found in the home environment and the surrounding community. According to the notion of a learning society, learning people actively investigate experiences in all aspects of their life (Wullur, 2019). Individuals who intentionally engage in self-directed learning activities. This is accomplished in a variety of methods, including listening to radio and television broadcasts, as well as reading newspapers, magazines, books, and pamphlets (Wullur'2018). The most fundamental idea of learning is the conscious and complete awareness that is internalized to seek and obtain information and insight, skills and perspectives on life from everywhere and from anybody, regardless of time and location of learning. This notion is known as learning without understanding time restrictions (no limit to learning), and the presence of PKBM in the community is expected to develop a perception that community-based learning truly delivers learning materials that are in accordance with the demands of the local community (Rahmat, 2004). (2018). The notion of community-based education (Learningbased society) will arise when the curriculum and learning materials are defined and executed by the community (Knowles, 2019). People tend to learn with traditional thinking patterns during the learning process, so students should be introduced to the concept of innovative learning (Innovative learning), which is realized through anticipatory learning (anticipatory learning) and participatory learning (Participatory learning) (Wullur, 2021). As a result, the learning method employs a learning strategy based on adult learning patterns.

As a result, mapping access to education services within the literate community for learning inhabitants at PKBM in North Sulawesi Province necessitates a unique approach strategy that combines learning and play. This learning strategy is very new, and it was developed through an action research process that followed the phases of relevant scientific research procedures.



3. Research Methods

This study has used the "Research and Development" method, following the stages of ADDIE model development research (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 is designed for 2 years and the first year 2022 has been carried out in 3 stages, namely: 1). Analyze stage, 2). Design stage, and 3). Development Stage. Meanwhile, for the second year, there will be 2 stages, the Implementation Stage, and the Evaluation stage. The stages of the research process are described as follows:

4. Research Results

1. Initial Product Design (Pictures and Explanations)

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

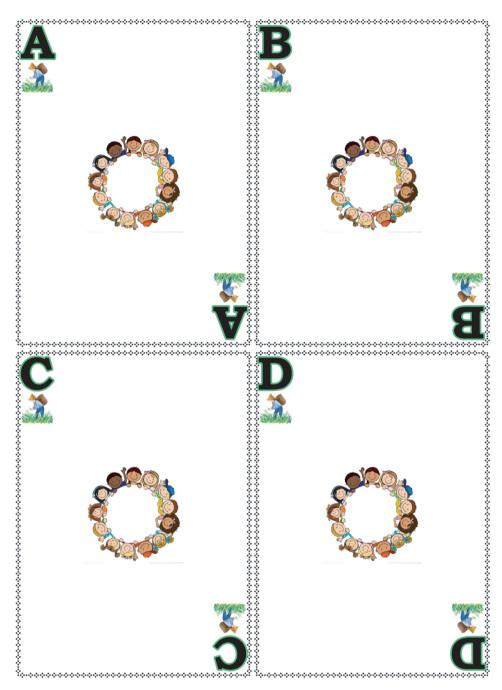


Figure 1

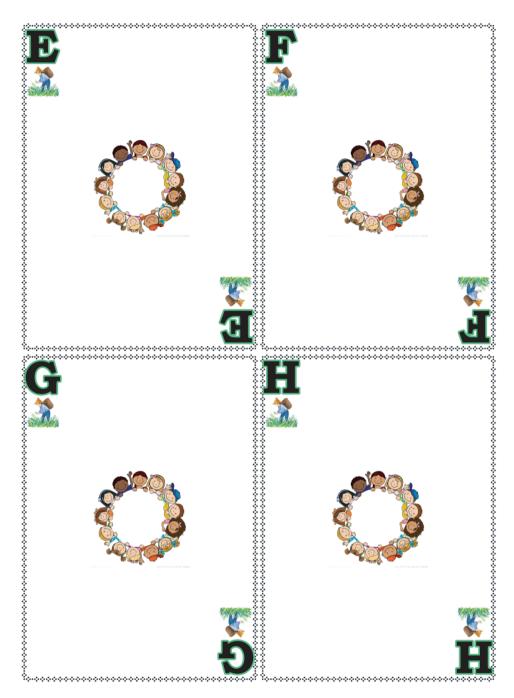


Figure 2



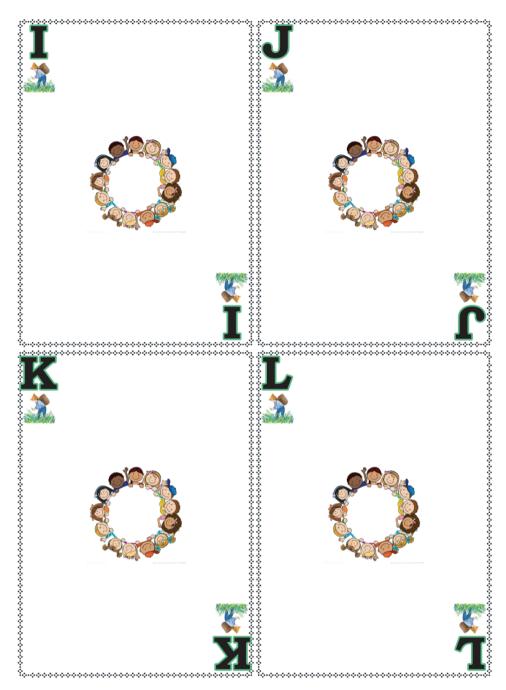


Figure 3

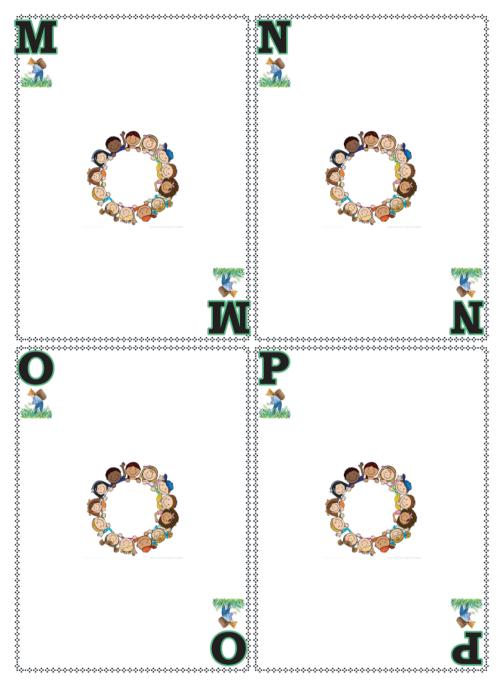


Figure 4

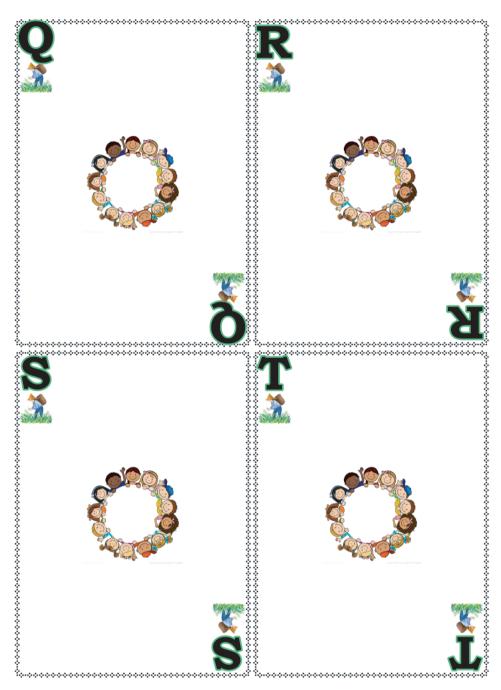


Figure 5

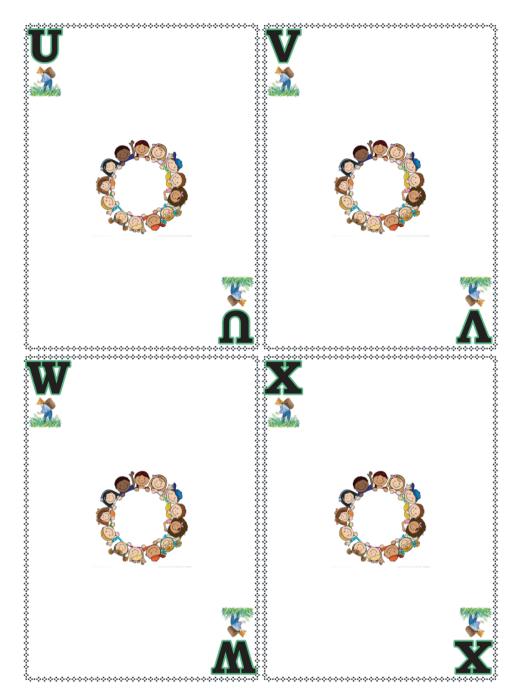


Figure 6



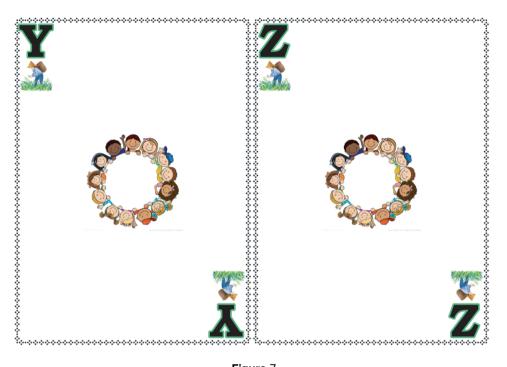


Figure 7





Figure 8



5. Explanation

- Alphabet Card Learning Media consists of two sides, namely; 1). Front and 2). Back side.
- 2. The front side has the letters of the alphabet from A to Z in the center, with images of children and fruits as symbols of the object of Out-of-School Education in the upper left and lower right corners.
- 3. The size of the Alphabet Card Learning Media is 8.5 cm long and 6.5 cm wide
- 4. This paper is constructed of cardboard and has a white foundation on the front and back.
- 5. Alphabet Card Learning Media are grouped in one pack consisting of four letters of the alphabet from A to Z, so that one pack consists of four letters of the alphabet from A to Z.
- 6. The alphabet card learning media letters are black and red in color.
- 7. The alphabet card learning media letter (1)'s accompanying image is a picture of children and fruits.
- 8. The picture accompanying the alphabet card learning media letter (2) is of a farmer in the garden.
- 9. The alphabet card learning medium letter (3) comes with an image of a fisherman and a paddler.
- 10. The alphabet card learning media letter (4)'s accompanying image is a farmer with a spade.
- 11. The back side has a white backdrop with the words "Let's Learn While Playing Together" FIP Unima Out-of-School Education.
- 12. Above the text, there are two images, one with the Ministry of Education and Culture's Tut Wuri Handayani logo and one with the Manado State University logo and a picture of the middle part of the learning community and tutors, and the lower right corner reads MMW, which stands for the inventor's name. Markus Mozes Wullur
- 1. Alphabet Card Learning Media Initial Product Trial (Phase I)



The findings of the three research groups, each having five games, yielded a number of suggestion notes, which were reviewed in the FGD as follows:

- Because the backdrop is white, learners have difficulties distinguishing and sorting which card is the front and which is the back. It is advised that the front card's backdrop not be the same as the card's background.
- 2. Residents discover that it is difficult to arrange alphabet cards because the letters are in the centre of the card and are disrupted by the accompanying graphics of the alphabet cards. To avoid interfering with the arrangement of the cards, it is advised that the letters of the alphabet cards put in the top left corner of the interior of the alphabet cards and the accompanying images be printed in the middle. In the player's control.
- 3. Alphabet cards are too thin and difficult to distribute, so it takes longer to divide the cards, and the print of the alphabet letters has the potential to be harmed by light or water contact, causing the color of the letters on the alphabet cards to fade. It is advised that alphabet card printing be done on thick paper or laminated printed paper so that they are neater and color graphics are not harmed by perspiration or water

1. Validation Process of Alphabet Card Learning Media Design

After completing a limited trial process, design analysis via Focus Group Discussion (FGD), and the validation process of the initial design of the alphabet card learning media, the validation process of the initial design of the alphabet card learning media was carried out via a limited game of one learning group while playing to determine the limitations of the initial design of the alphabet card learning media product with the game mechanism as follows:

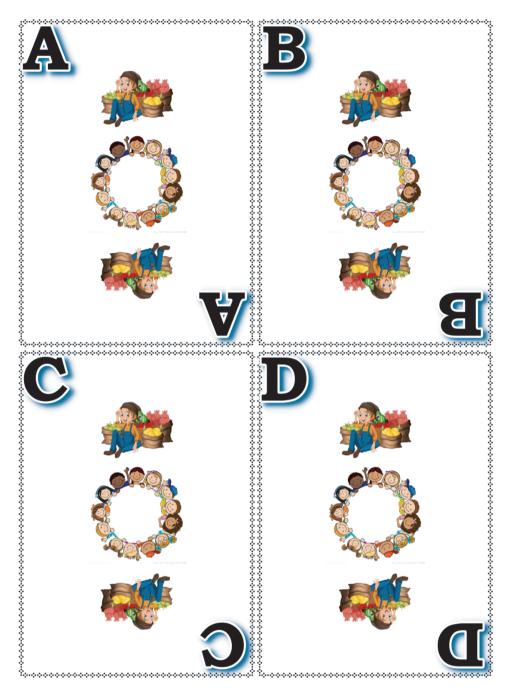


Figure 9



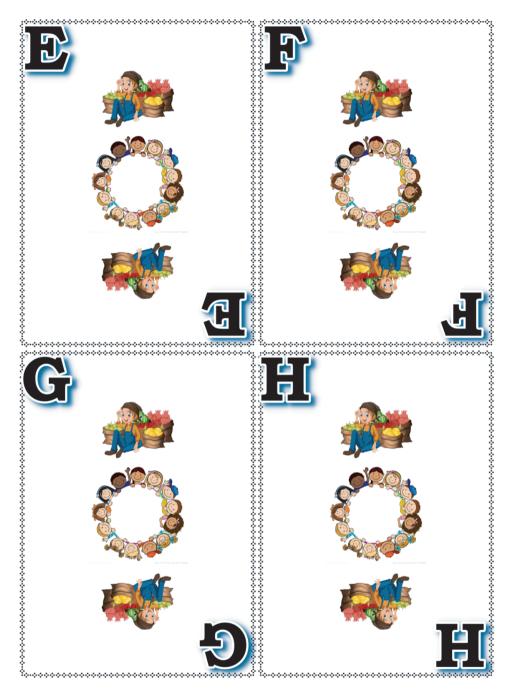


Figure 10

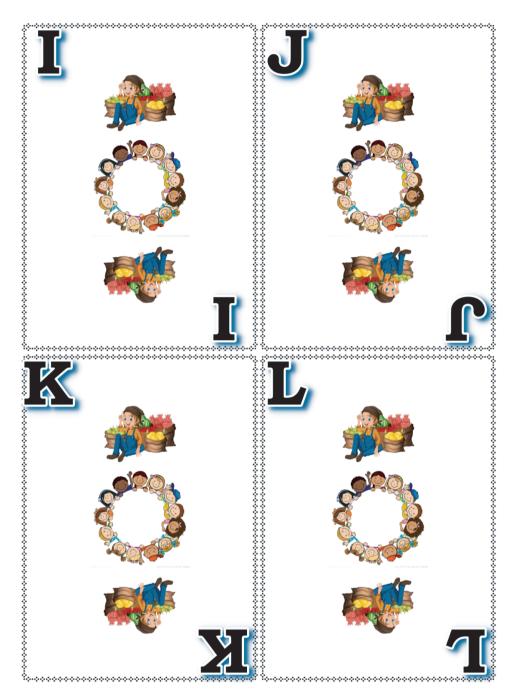


Figure 11

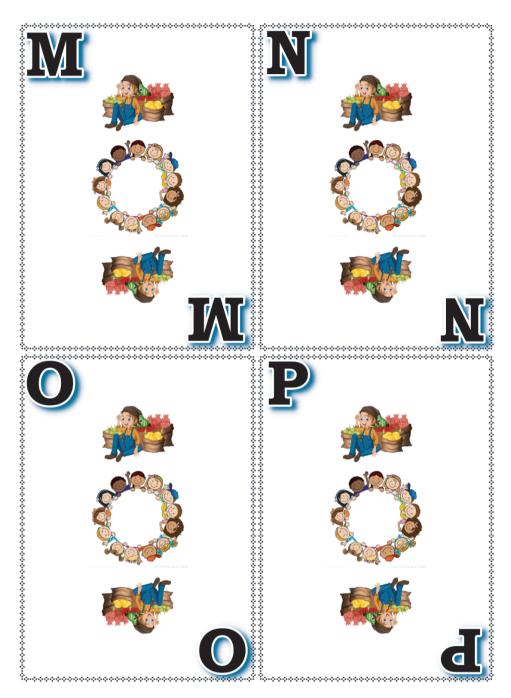


Figure 12

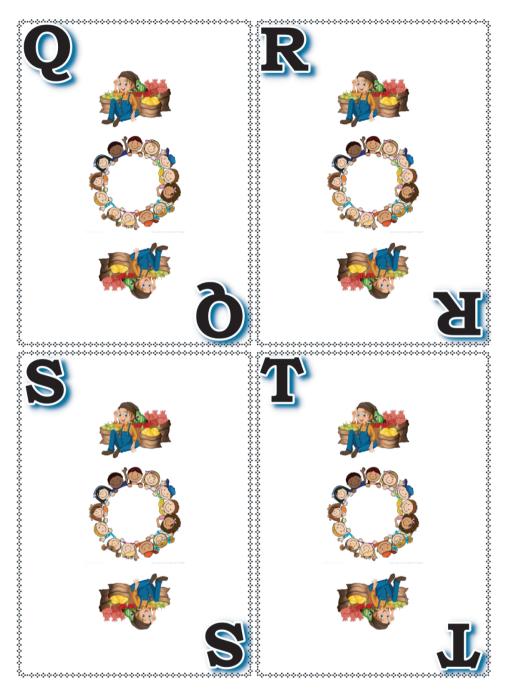


Figure 13

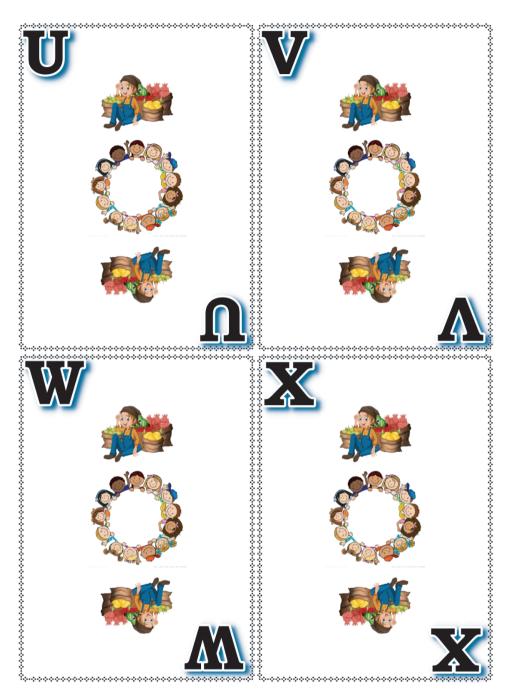


Figure 14



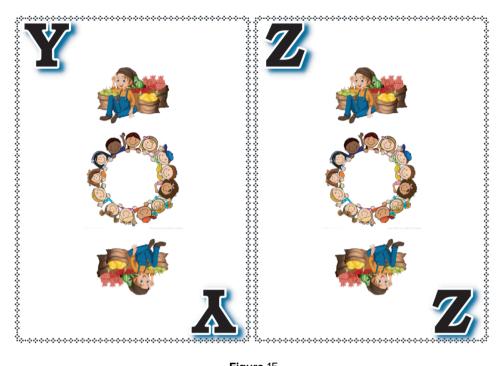


Figure 15

Page 218 DOI 10.18502/kss.v8i9.13332



Figure 16



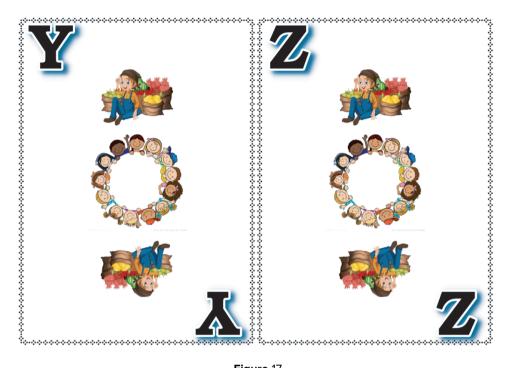


Figure 17

Page 220 DOI 10.18502/kss.v8i9.13332



5.1. Explanation of Game Design Revision and Technical Instructions:

- Alphabet Card Learning Media has two sides, one on the front and one on the back.
- 2. The front side features the letters of the alphabet from A to Z in the center, with images of children and fruits as symbols of out-of-school education materials in the upper left and lower right corners.
- 3. The Alphabet Card Learning Media measures 8.5 cm length and 6.5 cm broad.
- 4. This paper is constructed of cardboard and has a white foundation on the front and back.
- 5. Alphabet Card Learning Media are grouped in a pack of four letters of the alphabet from A to Z, so that one pack has four letters of the alphabet from A to Z.
- 6. The alphabet card learning media letters are black and red in color.
- 7. The alphabet card learning media's accompanying image is a picture of children and fruits.
- 8. The front side of the card is white, and the reverse side has a green backdrop that says "Let's Learn While Playing Together With Out-of-School Education, FIP Unima," with the wording upside down and the bottom not upside down so that the card position can be read for all card positions.
- 9. Above the text, there are two images, one with the logo of the Ministry of Education and Culture, Tut Wuri Handayani, and the other with the Manado State University logo and a picture of the learning community and tutors, and in the lower right corner, it says MMW, which stands for the name of the inventor, Mozes Markus Wullur.
- 10. Alphabet card graphics are laminated to prevent wrinkles and to maintain the image's color from sweat or water.

5.2. Technical Explanation of The Alphabet Card Game

1. Alphabet cards are divided into letters A through Z.



- 2. Each pack contains four parts of the alphabet ranging from A to Z.
- 3. Two packs of alphabet cards are utilized in the game, such that the letter A cards become 8 pieces, and the letter Z alphabet cards likewise become 8 pieces.
- 4. While playing, the learning group cannot include more than 5 (five) individuals.
- 5. The two packs of alphabetic cards are then uniformly jumbled and distributed to each member of the study group.
- 6. Each learner is given one alphabet card in turn, up to a total of nine alphabet cards, and each member of the study group is given as many as five alphabet cards so that the cards of the letters of the alphabet may be held and arranged easily.
- 7. The game is started by the group member who receives the tenth letter of the alphabet.
- 8. Prior to the distribution of the alphabet cards, it is decided that significant letters will be organized, which will serve as the game's objective (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 which are agreed upon before the game starts).
- 9. After receiving their alphabet cards, each places them in the agreed-upon order of the letters of the alphabet.
- 10. The member of the study group who receives the tenth card first discards one card to his right for the card in his hand that is deemed unnecessary.
- 11. Members of the study group's right side who discarded the first card were given the option of choosing and considering whether the card was discarded by the preceding player.
- 12. If the letter of the alphabet card matches the necessary letter, the card is taken, and the superfluous card is thrown.
- 13. If the previously discarded card is no longer required, the person in question can select one card from the card pool in the center, discard the superfluous card to his right, and so on in a clockwise fashion.
- 14. If the alphabetic cards are arranged in accordance with the agreed-upon arrangement of the letters of the alphabetical card, the game is declared over, and the



- game is for the victory of the group members who succeeded in arranging the meaningful alphabetic cards, despite the fact that there are still a number of other cards that are not arranged meaningfully.
- 15. If the alphabetical arrangement of cards indicates that they have not been arranged but the card drawn in the middle has been completely removed, all discarded cards are collected and shuffled before being placed in the center for the game to be continued by pulling out the card by the next member of the playing group from the last one to discard the card.
- 16. If the draw cards run out the second time but the significant cards have not been sorted, all cards in the hand and discarded cards are jumbled afresh and the game is determined to be resumed with no winner.

6. Discussion of Research Results

6.1. Design of Alphabet Card Learning Media

- 1. The alphabet card learning material is developed in the form of a game card graphic that comprises a selection of letters of the alphabet ranging from A to Z. This alphabetic letter design for kids employs capital letters (capital letters) with the font type Fond text Bookman Old Style Fond size 199 with a border and shadows on the letters for easy reading both with and without glasses. The letters of the alphabet are then divided into groups of black and red to make it easier and more exciting for kids to learn when constructing cards while playing.
- 2. The alphabet card learning media is designed to be 8.5 cm long and 5.5 cm wide, with a white front base color and a green background base color. The inhabitants study in the centre of the card, while the photos next to the circle are of youngsters and fruits, fisherman with paddles, and farmers with shovels.
- 3. The letters of the alphabet and their pictures are arranged in two positions, facing up and facing down, with the purpose that the card will appear in the right position. of the letters of the alphabet for pupils to read and not be confused. Similarly, the front and back colors of the alphabet cards are different, with the front being white and the base being white. Green's back view of the alphabet cards will also help residents learn how to arrange alphabet cards when learning to read while playing.

4. After the image of the alphabet card learning media product is completed, the printing process of the alphabet card learning media is laminated to facilitate the game process beginning with the card shuffling process, the card distribution process, the drawing card withdrawal process in the middle of the table, and the card preparation process becomes lighter, smoother and with a higher level of precision. Because the alphabet card learning medium has been laminated, the colors of the graphic s and letters on both the front and back of the card will not be easily harmed by splashing water or perspiration when playing or not playing. This letter card learning material, on the other hand, will not become wrinkled or destroyed quickly. As a result, each alphabet card learning media pack is careffuly placed in a box of alphabet card learning media cards that has been prepared for it.

The clearer, more full, and understandable form of the alphabet card learning media design display is ready to be evaluated after socialization, inspection, and repeated evaluation for the display of the picture of the alphabet card learning media.

6.2. Development of the reading learning process using alphabet card learning medium for learning citizens

The following procedures are taken by the researcher when the prototype of the alphabet card learning media product has been produced and printed and is ready for testing:

1. Creating a field data collecting team comprised of professors and students for each study site. The process of learning to read while playing with letter cards was tested by this team, which began with explanations and technical socialization of the game by the Chairperson and members of the study team. The field data collection team went to research locations in South Bolaang Mongondow, East Bolaang Mongondow, Talaud Islands, and North Minahasa after all of the field data collection teams knew, understood, and mastered the process of learning to read while playing through the alphabet card learning media. The task of the field data collecting team at the research site is to recruit tutors in each PKBM and SKB that carry out the Literacy program to conduct Training of Trainers (TOT) on the development of the learning process to read while playing with alphabet cards through media at the research site. Each tutor will organize a learning group



- for residents to study literacy with 5 persons in each group to make the learning process simpler.
- 2. The application of the growth of the learning process to read while playing with alphabet cards at the research site. The research team tested the alphabet card learning media through the process of learning to read while playing for residents to learn literacy at the location after the learning community groups were formed, using the Learning Implementation Plan (RPP) that had been prepared in coordination with the PKBM head and tutors at each research location. study. The following is the Learning Implementation Plan (RPP):
- 3. The efficacy of the use of the learning process to read while playing using alphabet cards produced for learning citizens. After conducting field trials and then reviewing them with the research team, tutors, and expert teams in a Focused Group Discussion (FGD), it was determined that the effectiveness of the implementation of the learning process to read while playing using the alphabet card learning media was declared effective with the following indicators:
- 4. Learning inhabitants who were formerly illiterate (forget letters) have re-acquainted themselves with letters.
- 5. The thinking skills of learning residents increase by choosing letters meaningfully according to the choice of each object based on a separated theme.
- 6. There is an increase in the skill of choosing alternative series of letters that refers to the alternative choice of objects from the agreed theme. Example: The agreed theme Name of the Animal/Animal: The choice of objects from the theme include: Buffalo, Cows, Horses, Goats and the like. Residents learn to string the letters of the alphabet into meaningful letters into one syllable, such as the words Buffalo, Cow, Horse, Goat, and the like.
- 7. The learning residents' participation is quite high because the learning process is carried out while they are playing, and they are unaware that the learning materials are designed for them to learn to recognize letters, read, and assemble letters into meaningful syllables using the Andragogy learning approach (Adult Education Approach). On the one hand, this alphabet card learning media is an excellent learning technique for people studying literacy in PKBM, but it may also be turned into a learning media for external educational activities. Schools in general, and



learning media for this alphabet card in particular, can be used as a medium of instruction in formal educational institutions, community groups, and families.

7. Conclusion

- 1. The Alphabet Card Learning Media prototype product design can be known, understood, understood, and mastered by learning residents in the learning process while playing with a number of improvements towards perfecting images and writing on the part or back side of the alphabet card learning media by eliminating the Ministry of Education and Culture symbol and the UNIMA symbol for the benefit of Patents and Product IPR.
- 2. The following phases are followed in the application of the development of the learning process to read while playing with the learning medium of alphabet cards for learning citizens:
- 3. Recruiting instructors in each of the PKBMS at the research site,
- 4. In each PKBM, tutors recruit potential citizens to learn literacy and establish study groups, with each group consisting of 5 (five) persons and a maximum of five study groups.
- Conducting Training of Trainers (TOT) for tutors to learn about the prototype of the alphabet card learning media, as well as the technical game of the alphabet card learning media, utilizing the Learning Implementation Plan that has been established (RPP).
- 6. Trials of developing the learning process of reading while playing with learning media alphabet cards for learning residents in the form of study groups by the research team in aiding tutors in each PKBM at the research location should be carried out.
- 7. The application of the learning process to read while playing with the alphabet card learning media created for learning citizens has been judged successful, with accomplishment markers such as: 1) Learning inhabitants who were formerly illiterate (forgot letters) have re-acquainted themselves with letters; 2) Learning citizens' thinking skills improve by selecting letters to improve the abilities of alternative letter choices that correspond to alternative object choices from the



agreed subject. Example: The agreed-upon topic Animal/Animal Name: Objects from the topic include Buffalo, Cow, Horse, Goat, and more. Residents learn to tie the letters of the alphabet together to form meaningful words, such as Buffalo, Cow, Horse, Goat, and so on. 3). Learning occupants participate actively since the learning process is conducted out as they play, and they are unaware that the learning materials are created for them to learn to identify letters, read, and combine letters into meaningful syllables utilizing the Andragogy learning technique (Adult Education Approach).

8. Suggestion

- In general, the Alphabet Card Learning Media Card product design may be utilized in conjunction with tutoring ideas to create and construct an adaptable Learning Implementation Plan (RPP) for the learning needs of learning citizens.
- 2. This Alphabet Card Learning Media product's design should be updated in the following ways: 1). The actual length and breadth of the Alphabet Card should be increased to 10cm and 7cm (10 x7cm); 2). The graphic on the back of the alphabet card needs to be updated. For the advantage of intellectual property and patent rights, the Ministry of Education and Culture's and Unima's logos are changed with a particular symbol or picture.
- 3. This research is just in the Analyze, Design, and Develop stages, thus the research product is not yet complete. The alphabet card learning medium has reached the first version version and must now be implemented and evaluated.

References

- [1] Non-formal education and human development in Indonesia. Scientific journal of non-formal education STKIP, Siliwangi Bandung.
- [2] The Community Learning Activity Center in increasing economic growth and welfare of the society according to the SDG target. SPEKTRUM: Non formal education journal.
- [3] The role of Nusa Indah Community Learning Activity Center in improving the service of the Non-formal Education Program in North Sumedang District, Sumedang Regency. Journal COMM-Edu



- [4] Implementation of Non-formal education program policies organized by Aprilia The Community Learning Activity Center in Kaburaya district. Thesis Journal
- [5] The existence of Community Learning Activity Center based on local resources, in the development of education. Proceedings of the National Education Seminar FKIP UNTIRTA
- [6] Strengthening the management of community learning activity centers in improving the quality of non-formal education services. Scientific Journal: Vision of primary school teacher in implementing community-based education programs, media economics and management.
- [7] Analysis of the effectiveness of community learning activity center performance in implementing community-based education programs, media economics and management. Vol 32
- [8] Wullur MM, Senduk JF, Maramis AA. Meta-analysis of correlational research about the relationship between managerial capabilities of principal with teacher performance. Advances in Social Sciences. Education and Humanities Research. 2018;299:484–489.
- [9] Wullur MM. Relationship of leadership style and achievement motivation to productivity of training and education participants in North Sulawesi, Indonesia. *Adv Soc Sci Educ Humanit Res.* 2019;382:229–233.
- [10] Wullur MM, Werang BR. Emotional exhaustion and organizational commitment: primary school teachers' perspectives. *Int J Eval Res Educ*. 2020;94:912-919.
- [11] Werang BR, Leba SM, Agung AA, Wullur MM, Yunarti BS, Asaloei SI. Indonesian Teachers' emotional exhaustion and commitment to teaching: A correlational study. *Cypriot J Educ Sci.* 2021;16(2):522–531.
- [12] Education and training for religious harmony to increase solidarity in driving the value of tolerance among religious teachers. *J Educ Manage Mat*
- [13] Rahmat A. Empowerment management in non-formal education, ideas published in Gorontalo. 2018.
- [14] Knowles MS, Holton EF III, Swanson RA, Swanson R, Robinson PA. The adult learner: Definitive classic in adult education an human resource development, Copyright. Miami; 2019.
- [15] Sugiyono. Educational research methods: Quantitative, Qualitative and R & D approaches. Publisher: Alfabeta Bandung; 2010.