



Media Model for Catching Baseball in Class IV at Elementary School

Annisa Tri Heriani^{1*}, Eka Fitri Novitasari², Mastri Juniarto³

^{1,2,3} Universitas Negeri Jakarta, Indonesia

*Corresponding Author: Annisa Tri Heriani, e-mail: herianiannisatri@gmail.com

Received: 30 September, Accepted: 14 October 2023, Published: 31 October 2023

Abstract

Objectives. The aim of this study is to develop an efficient media model that can support fourth-grade students in elementary schools to enhance their learning of baseball catching. This media model is designed to enhance their motor skills and comprehension of fundamental concepts related to baseball catching. The research methodology involves creating a media model that caters to the students' learning needs and characteristics. The primary objective is to encourage the students' active participation during the learning process and assist them in mastering the baseball catching technique using gloves covered with Velcro. The ultimate goal is to improve the baseball catching skills of fourth-grade students.

Materials and methods. The research employs the ADDIE model, which includes five stages: analysis, design, model development, implementation, and evaluation. Designing a glove model for fourth-grade students requires testing and analyzing various materials and shapes to identify the optimal design that caters to the students' size and characteristics.

Results. Designing a high-quality glove model is crucial for enhancing students' ability to catch baseballs with ease and ensuring maximum comfort and safety. The validity test score of 0.7 confirms the model's accuracy, while its high reliability value of 0.6 ensures consistent and dependable performance.

Conclusion. The development of Velcro glove media was validated by 13 experts who strongly agreed with an average percentage of 89.3%. This glove is intended to improve baseball catching skills among students and encourage their participation in physical activities.

Keywords: Media, Baseball, School

DOI: 10.35724/mjpes.v6i1.5571

©2023 Authors by Musamus University Merauke



Introduction

Physical education is an integral part of the Elementary School (SD) curriculum (Hermawan, 2000), namely a learning process, an activity that systematically aims to improve physical fitness, develop motor skills, body, intelligence, attitude, mental, emotional, spiritual and social. Students are encouraged to be more innovative, skilled, creative, able to understand

and master the material and practice what they have learned. In the learning process there are links that cannot be separated, namely the teacher and students. In this context, the teacher's role in the curriculum includes, among other things, the use of models, methods and media that can support the process, differentiate values and increase teacher professionalism (Erwin Akib et al., 2020). Good teachers also act as facilitators, or create the best learning. Physical education is an important educational process (Gonçalves et al., 2022). Through well-implemented physical education, students will develop skills that are useful for them in life, visible in every activity that contributes to a healthy and fit lifestyle, develops socially, and affects their mental and physical health (Corbin, 2021). In this study, class IV was chosen as the research object, because in the learning curriculum there are competency standards and basic competencies in semester 1 KD 4.2. namely practicing variations of basic locomotor, non-locomotor and manipulative movements in accordance with the concepts of body, space, effort, and connectedness in simple and/or traditional small ball games. The learning media development that will be developed is in the form of media development to make it easier and make students interested in learning to catch baseballs in class IV in elementary schools which will be developed. Learning media is anything that can be used to help the learning process. Media is a tool that conveys or delivers teaching messages, while learning media is all the means, tools and media used in the learning process (Dahniar Widya Puspita Dewi et al., 2021).

Learning media are all means used to convey information or learning material to students with the aim of helping students gain a better understanding. Learning media that suits the needs of effective and efficient learning activities so that the material delivered by teachers to students can be absorbed and understood optimally (Tanggoro, 2015). Learning media in education and in the teaching and learning process is very necessary and plays a role important in student development at school (Tafonao et al., 2019). Based on the results of the author's interviews with State Elementary School 1 teachers East Rangkasbitung, that when learning throwing and catching at school, they don't use tools to carry out catching movements and use tennis balls in general, so that quite a few students experience difficulties when throwing, hitting and catching. Some people throw the ball too fast and it bounces so far that it doesn't hit their friend on target, there are also those who throw it right at the student who catches it but they have difficulty catching it because their hands are slippery to get the baseball.

Researchers developed a learning tool to improve catching skills. They modified gloves with Velcro adhesive to make it easier for students to catch the ball. When the ball bounces, it immediately sticks to the hand wearing the glove. The goal is to increase student engagement

and interest in learning how to catch small balls. This model also encourages teachers to be more creative in providing catching and throwing material, so that they can better meet the learning objectives of this activity. The hope is that this will help sports teachers to better meet the expectations of parents and students alike. Based on the information provided, the researcher intends to undertake a study entitled "Media Model for Catching the Ball in Class IV in Elementary School." The purpose of this research is to explore the most effective media models for teaching ball-catching skills to elementary school students in fourth grade. The study will aim to identify the best strategies for improving students' ball-catching abilities in physical education classes. By examining various media models, the research will provide valuable insights into the most effective teaching methods for this age group.

Materials and methods

Study participants.

The research was conducted at SDN 1 Rangkasbitung Timur, with 15 class IV students as research participants. In addition, 10 sports teachers were involved as validators of the assessment of the velcro glove media, while 3 experts were consulted to validate the assessment questionnaire and another 3 experts were involved in validating the learning media.

Study organization

Researchers have conducted a study using research and development (R&D) to create and validate models that help students learn how to catch in the game of rounders. The study involved developing velcro gloves specifically designed for Class IV students in elementary schools. The aim was to create a simple and safe tool to aid in catching and throwing activities. To develop this tool, several models for throwing and catching were used to ensure an effective learning experience.

Statistical analysis.

The ADDIE model is a development model created by a researcher. It consists of five stages: analysis, design, development, implementation, and evaluation. During the analysis stage, existing resources are reviewed to determine how they can be used to create the product. In the design stage, the learning method is created. The development stage involves using media that previously existed to create the product. Implementation is when the product is put into use, and evaluation takes place at the end to determine its effectiveness. The results of the evaluation are used to improve the product for the user.

Results

During the study, three experts were involved in testing the feasibility of the media validation questionnaire, and three other experts along with ten sports teachers acted as validators for the development of Velcro glove media. The experts provided their judgments to improve the design of the Velcro glove media for fourth-grade students in elementary schools. After the study, the assessments of the 13 validators showed that the Glove Development Model for Catching Baseballs achieved an 89.32% score, which falls in the Strongly Agree category. The assessment details are as follows:

Learning Media Expert Validation Results Data

Researchers have created a product design that was validated by Dr. Oman Unju S, M.Pd., a lecturer in learning media at Jakarta State University. The validation test was conducted on July 18, 2023. Based on the data obtained from the results of the feasibility test by experts, there were suggestions and comments to further explain the specifications of the material. It was also suggested that the development of this media can be used for elementary school students. Overall, the assessment aspect showed that the validation test results had an average value of 94.4%, which falls under the 'Strongly Agree' category, making it suitable for research purposes.

Table 1. Validation Results by Experts

No.	Validator	Sub Indicator	Total	Percentage	Category
1.	Dr. Oman Unju, S.Pd	Suitability	23	95.83%	Strongly agree
		Convenience	23	95.83%	Strongly agree
		Interesting	22	91.6%	Strongly agree
	Total			94.4 %	Strongly agree

Learning Expert Validation Results Data

The product design created by researchers has been validated by Dr. Iwan Setiawan, M.Pd. Dr. Setiawan is a teaching lecturer at Jakarta State University. The validation test was conducted on July 18th, 2023. Based on the data obtained from the results of the feasibility test by experts, the overall assessment aspect received a validation test result of 76.3%, which falls under the "Strongly Agree" category, indicating that it is suitable for use in research.

Table 2. Validation Results by Experts

No.	Validator	Sub Indicator	Total	Percentage	Category
1.	Dr. Iwan Setiawan, M.Pd	Suitability	18	75.0 %	Agree
		Convenience	18	75.0 %	Agree
		Interesting	19	79.1 %	Strongly agree
		Total		76.3%	Strongly agree

Learning Expert Validation Results Data

Researchers have created a product design that has been validated by Dr. Sujarwo, M.Pd. He is a teaching lecturer at Jakarta State University. The validation or appropriateness test was conducted on July 18, 2023. Based on the data obtained from the feasibility test conducted by experts, the overall assessment aspect of the validation test resulted in an average value of 94.4%, which falls under the Strongly Agree category. This indicates that the product design is suitable for use in research.

Table 3. Validation Results by Experts

No.	Validator	Sub Indicator	Total	Percentage	Category
1.	Dr. Sujarwo, M.Pd	Suitability	22	91.6 %	Strongly agree
		Convenience	24	100%	Strongly agree
		Interesting	22	91.6 %	Strongly agree
		Total		94.4%	Strongly agree

PJOK Teacher Validation Result Data

It has been reported that researchers has successfully developed a product design that has been assessed and approved by a total of 13 PJOK teachers.

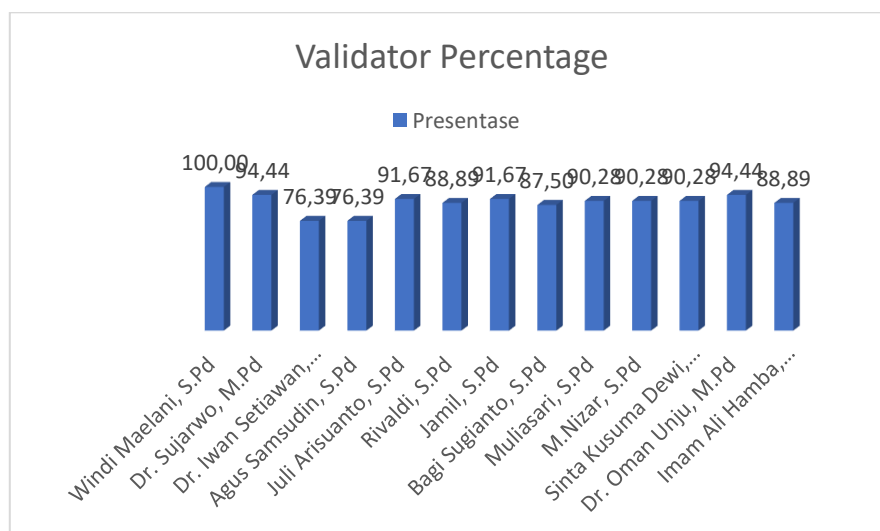
Table 14. Percentage Results of 13 Validators

No	Validator	Percentage
1	Windi Maelani, S.Pd	100%
2	Dr. Sujarwo, M.Pd	94.4 %
3	Dr. Iwan Setiawan, M.Pd	76.3%
4	Agus Samsudin, S.Pd	76.3%
5	July Arisunto, S.Pd	91.6%
6	Rivaldi, S.Pd	88.8%
7	Jamil, S.Pd	91.6%
8	For Sugianto, S.Pd	87.5%
9	Muliasari, S.Pd	90.2%
10	M. Nizar, S.Pd	90.2%

	Sinta Kusuma Dewi,	
11	S.Pd	90.2%
12	Dr. Oman Unju, M.Pd	94.4%
13	Imam Ali Servant, S.Pd	88.8%

Table 15. Total Validator Assessment Percentage Results

No	Variable	Number of Questions	Total	Percentage	Category
1	Suitability	6	275	88.14 %	Strongly agree
2	Convenience	6	282	90.38%	Strongly agree
3	Interesting	6	279	89.42%	Strongly agree
	Total	18	836	89.32%	Strongly agree

**Figure 1.** Assessment graph for 13 validators

Conclusions

Based on all the data obtained from the results of expert validation and through several validation stages, the researcher can draw the conclusion that the Velcro glove media model for catching baseballs in class IV students in elementary schools is based on data obtained as a whole from learning media experts, and learning experts stated that the model for developing gloves for catching baseballs in baseball games is suitable and suitable for use.

Acknowledgment

The researcher would like to thank the principal of SDN 1 Rangkasbitung Timur who has given permission to the researcher to conduct research at this school as well as the teachers

who have been involved and helped the researcher in completing this research and to the class IV students of SDN 1 Rangkasbitung who have enthusiastic in making this research a success.

Conflict of interest

Researchers have no conflict of interest

References

- corbin, C. B. (2021). Conceptual Physical Education: A Course For The Future. *Journal Of Sport And Health Science*, 10(3), 308–322. <https://doi.org/10.1016/J.Jshs.2020.10.004>
- Dahnar Widya Puspita Dewi, Widiastuti, & Samsudin. (2021). Badminton Smash Skill Training Model For High School Beginners Students. *Gladi: Jurnal Ilmu Keolahragaan*, 12(04), 237–247. <https://doi.org/10.21009/Gjik.124.03>
- Erwin Akib, Muhammad Erwinto Imran, Saiyidah Mahtari, Muhammad Rifqi Mahmud, Anggy Giri Prawiyogy, Irfan Supriatna, & Mt. Hartono Ikhsan. (2020). Study On Implementation Of Integrated Curriculum In Indonesia. *Ijorer: International Journal Of Recent Educational Research*, 1(1), 39–57. <https://doi.org/10.46245/Ijorer.V1i1.24>
- Gonçalves, L. L., Parker, M., Luguetti, C., & Carbinatto, M. (2022). The Facilitator's Role In Supporting Physical Education Teachers' Empowerment In A Professional Learning Community. *Sport, Education And Society*, 27(3), 272–285. <https://doi.org/10.1080/13573322.2020.1825371>
- Hermawan, H. A. (2000). *Reviewing Substance Of Physical Education Curriculum For Children At Pre-School (Kindergarten) And Elementary School On The 1st Grade*.
- Tafonao, T., Setinawati, S., & Tari, E. (2019). The Role Of Teachers In Utilizing Learning Media As A Learning Source For Millenial Students. *Proceedings Of The Proceedings Of The 1st Asian Conference On Humanities, Industry, And Technology For Society, Achits 2019, 30-31 July 2019, Surabaya, Indonesia*. Proceedings Of The 1st Asian Conference On Humanities, Industry, And Technology For Society, Achits 2019, 30-31 July 2019, Surabaya, Indonesia, Surabaya, Indonesia. <https://doi.org/10.4108/Eai.30-7-2019.2287549>
- Tanggoro, U. (2015). *The Use Of Instructional Media To Improve Students' Motivation In Learning English*. 3(1).

Information about the authors

Annisa Tri Heriani: herianiannisatri@gmail.com , <https://orcid.org/0009-0009-7324-4974> , Physical Education, Jakarta State University, Indonesia.

Dr. Eka Fitri Novitasari, M.Pd: efnovita@unj.ac.id , <https://orcid.org/0000-0002-1208-6054> , Physical Education , Jakarta State University, Indonesia.

Mastri Juniarto, M.Pd: mastri@unj.ac.id , Physical Education , Jakarta State University, Indonesia.

Cite this article as: Annisa Tri Heriani, et al (2023), Media Model for Catching Baseball in Class IV at Elementary School, *Musamus Journal of Physical Education and Sport (MJPES)*, Volume 6, No 1, 2023, 246-252, <https://doi.org/10.35724/mjpes.v6i1.5571>