



Development Of Learning Media Based on Car Racing Games In Mandarin Subjects For Class X Pangudi Luhur Don Bosko High School Semarang

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Keywords:

Development, learning media, car racing, vocabulary, mandarin language

Abstract

By promoting fun and exciting learning, researchers develop a product that can be used in the teaching and learning process with a view to increasing the learning motivation of all students in learning and assisting educators in making it easier for an educator to deliver lessons. The purpose of this study is 1) to describe the result of the analysis of the needs of students and teacher on the development of car racing game media in Mandarin class in X class at Pangudi Luhur Don Bosko high school 2) to describe the prototype of the development of car racing game media in X class at Pangudi Luhur Don Bosko high school 3) to describe the result of expert validation on the development of car racing game media in X class at Pangudi Luhur Don Bosko high school developed by researchers. The study uses research and development methods with five stages, namely 1. Potential problems, 2. Data collection, 3. Product design, 4. Product validation, 5. Product revision. From the results of the analysis of interviews with subject teachers and analysis of needs questionnaires student agree with development of game- based learning media that are creative, effective and fun. The validation result show that the car racing game-based learning media gets an average score of 87 from media expert and 87,5 from material expert, both of which show a score of 4 which means the media is very feasible to use. The media is then corrected according to suggestions and input from expert.

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INTRODUCTION

Along with the times, the ability to speak a foreign language is something that must be owned by every individual. One of the foreign languages whose development over time is growing rapidly is Mandarin (Ndruru et al., 2022). Currently, many Indonesian educational institutions ranging from elementary schools to high schools include Mandarin as one of their subjects (Budhi et al., 2016). Learning a foreign language is certainly not an easy thing, because from birth a person is accustomed to using the mother tongue. So that in learning a foreign language will definitely experience various difficulties. In learning Mandarin, there are often problems that arise that hinder students' understanding of learning Mandarin. When learning Mandarin there are four kinds of abilities that must be mastered by learners, namely reading, writing, listening and speaking skills (Ndruru et al., 2022).

Pangudi Luhur Don Bosko High School is one of the private high schools in Semarang City. Pangudi Luhur Don Bosko High School or commonly referred to as Pangudi Luhur Don Bosko High School is one that makes Mandarin language as a local content subject. Mandarin is taught in all classes starting from class X to class XII both mathematics- science and social. At Pangudi Luhur Don Bosko High School, Mandarin lessons have a fixed meeting schedule of once a week.

As an effort to streamline the foreign language learning process, a learning media is needed (Safitri, 2017) including in Mandarin language learning, learning support tools are needed so that the delivery of material from teachers to students can run optimally. Teachers must have a good teaching strategy in order to produce good learning products for students. Currently, there are still many teachers who only use the lecture method as a way to convey material to students. This is based on a lack of media or a lack of teacher ability to create new media as a means of learning activities. This will trigger a sense of boredom which results in the unfocusedness of students in receiving the subject matter, so that students will find it difficult to understand the material being taught. This it would be nice if in learning activities can use media as a means to convey material from teachers to students. At Pangudi Luhur Don Bosko High School in class X, especially social studies classes, they tend to be more silent and very less active, then in class X Mathematics-science which is actually a lot of children who are quite smart but still the same is not responsive if there are questions that want to answer only a handful of children, this is also reinforced by the results of observations of class X social 2 and class X social 3.

Pangudi Luhur Don Bosko High School Mandarin language learning at Pangudi Luhur Don Bosko High School has been running quite well, but there are still many difficulties experienced by students in learning Mandarin. They tend to be less active and are afraid to answer or express their opinions for fear that what they say is wrong. Teachers usually use learning support media such as modules and PPT. The module design used is simple which includes teaching materials such as vocabulary, simple sentences, and exercises for students.

Car racing is a simple game using paper as the board or place to play, and dice as a tool to start the game. This car racing game media can be used as one of the creative and innovative game media in learning Mandarin. This car racing game is similar to other dice games such as snakes and

ladders or monopoly, so this car racing game can be used for creative Mandarin language learning media in schools. One of the advantages of this car racing game is that the rules are easy to understand and can also shape students' skills in group cooperation. In addition, with a quite exciting game, car racing can also increase students' motivation to learn and can improve skills in memorizing vocabulary and speaking in Mandarin. By prioritizing fun and exciting learning, this is also the background for researchers to develop a product that can be used in the teaching and learning process with the intention of increasing the learning motivation of all students in learning and helping teachers in making it easier for an teachers to convey learning material in a more fun and enjoyable way.

The objectives of this study are :

1. To describe the results of the analysis of student and teacher needs for development of learning media based on car racing games in mandarin subjects , to describe the procedure for for development of learning media based on car racing games in mandarin subjects, and to describe the results of expert validation of for development of learning media based on car racing games in mandarin subjects for class X Pangudi Luhur Don Bosko High School Semarang

METHODS

In the research that the author conducted using the research and development method or Research and Development. According to Sugiyono (2012, p. 407) Research and Development or RnD is a research method used to produce certain products, and test the effectiveness of these products. Product development is not only used in one field, but can cover many fields, one of which is the field of education. Research and development is a process or steps to develop a new product or to improve an existing product that can be accounted for (Sukmadinata, 2006, p. 164). The definition of development research according to Borg & Gall as cited by (Sugiyono, 2015, p. 9) is a process used to develop and validate an educational product.

Based on several opinions from experts, it can be concluded that research and development or R&D is research that will produce a new product or improve existing products. Development research can produce several learning media products in the form of books or printed teaching materials or teaching materials in the form of audio, visual or audiovisual. The product that will be produced in this research is an educational product, namely car racing game media.

Research and development according to Sugiyono (2015) has ten steps in the process of developing a product, namely:

1. Potential Problems
2. Data Collection
3. Product Design
4. Product Validation
5. Product Revision
6. Product Trial
7. Product Revision
8. Usage Trial

- 9. Final Product Revision
- 10. Mass Production

Of the 10 steps of the research and development model, this research will only use the first 5 steps, namely (1) Potential Problems, (2) Data collection, (3) product design, (4) product validation, (5) product revision.

The data validity test technique in this study uses triangulation techniques. Data collection was carried out in 3 ways, namely observation, interviews and questionnaires. By using triangulation techniques, the research results will be obtained in accordance with the facts in the field and are not the result of plagiarism or copying other people's work.

The data analysis techniques used in this study are: (1) processing observation data, (2) processing interview data and (3) processing questionnaire data.

RESULT AND DISCUSSION

The results in this study include three things, namely (1) To describe the result of analysis of student and teacher needs for development of learning media based on car racing games in Mandarin subjects for class X Pangudi Luhur Don Bosko High School Semarang , (2) To describe the prototype of development of learning media based on car racing games in Mandarin subjects for class X Pangudi Luhur Don Bosko High School Semarang (3) to describe the result of expert validation of development of learning media based on car racing games in Mandarin subjects for class X Pangudi Luhur Don Bosko High School Semarang

Results of Car Racing Learning Media Development

Car Racing learning media is a 3-dimensional media including game board, dice, car-shaped pawns, question cards, vocabulary cards, bonus cards, punishment cards, and game instructions.

Game component



Picture 4.1 Game Board

The materials used to make the Car Racing game board are a 41 cm x 33 cm wooden board, and 230 gram ivory paper for the design drawings. This board is used as the main component in this Car Racing game because it contains the track or game path.



Picture 4.2 Question Card

The question card design consists of 3 main parts: the top part is the card description, the middle part is the picture corresponding to the question, and the bottom part is the question written using hanzi and pinyin characters. Printed with HVS material and size 9 cm x 6 cm.



Picture 4.3 Vocabulary Card

The Vocabulary Card design has 3 main parts, namely the top is the card description, the middle is the hanzi, pinyin and meaning in Indonesian, the bottom is the command instructions of the card. Printed with HVS material with a size of 9 cm x 6 cm. The background color used is bright colors with light blue as the main color. The vocabulary cards are based on the vocabulary in chapter 5 of the module book used in class x of Pangudi Luhur Don Bosko High School Semarang.



Picture 4.4 Bonus Card

The bonus card consists of 4 parts, the four parts are the top part which is the description of the card, the middle part is an image that corresponds to the bonus obtained and the bonus description written in Times New Roman font, the bottom is a star image that is intended as an illustration of the reward card description. Printed with HVS material and size 9 cm x 6 cm. The background color used is purplish blue



Picture 4.5 Punishment Card

The design of the punishment card consists of 4 parts, namely the top part is the description of the card, the middle part which is a picture that corresponds to the punishment as well as a

description of the punishment written in Times New Roman font, and the bottom is an illustration of a hand holding a card that is meant as a sign of giving punishment. Printed with HVS material, measuring 9 cm x 6 cm. The background color used is black.



Picture 4.6 Game Guide card

The design of the Game Guide card has several parts, namely the top is a description of the card, the middle is a description of the instructions on how to play. This instruction card is printed using HVS paper with a size of 25 cm x 18cm. The instructions for how to play are typed using Times New Roman font. The background color used is a bright color, namely dark green. The guide card is made to make it easier for students to use the game media.

Validation Result

Validation was carried out by two experts, namely media experts and material experts. Media validation of the product that has been developed was carried out by Mrs. Retno Purnama Irawati, S.S., M.A as a lecturer at Semarang State University. Validation by media experts includes 2 aspects, namely (1) Visual Aspects and (2) Communication Aspects.

No	Aspects	point
1.	Visual Aspect	86,5
2.	Communication Aspect	88
	Rata-rata	87

Based on the results of validation from media experts on development of learning media based on Car Racing games, it can be concluded that the overall average score is **87** which is included in score A (score range 86-100) category is very feasible or very suitable. This means that this learning media from the visual aspect and communication aspect is declared very feasible or very suitable. However, the validator, namely the media expert, provides input suggestions so that empty plots can be filled with vocabulary so that all game plots are filled.

While the material validation was carried out by a Mandarin language material expert from Semarang State University, Mrs. Anggraeni, S.T., MTCSOL. Material expert validation covers 4 aspects, namely Content Feasibility Aspects, Presentation Feasibility Aspects, Intellectual Assessment Aspects, Language Feasibility Aspects.

No	Aspek	Nilai
1.	Content Feasibility Aspects	86
2.	Presentation F. Aspect	88
3.	Intellectual Assessment	88
4.	Language Aspect	88
Rata-rata		87,5

Based on the results of validation by material experts contained in the table above, it can be concluded that the overall average aspect of the material gets a score of 87.5, which means that the value is included in score A (value range 86-100) by obtaining a very feasible / very appropriate category. Which can also mean that this Development of learning media based on Car Racing games is declared feasible and appropriate in terms of covering material aspects. However, the material expert as the validator also provided suggestions and input in the form of changing the card material from HVS paper to Ivory paper or laminated HVS paper and repairs for typos or errors in writing.

Media Revision Results

Based on the suggestions from the validators, it is necessary to make improvements to the media in order to perfect the media being developed, namely improvements to the visual aspect by filling in empty plots with vocabulary. so that there are no empty plots on the game board, and changing the card material from HVS paper to Ivory paper or laminated HVS paper and fixing typos or errors in writing. The plots on the game board before the revision were not all filled with vocabulary there were some plots that were left empty, so the validator suggested filling in the empty plots using vocabulary contained in the material so that all the plots on the game board were filled. The card component in the game before revision used HVS paper, so the validator suggested changing the card material using Ivory paper. While the game guide before the revision had several typos or errors in writing, so the validator asked to be checked and corrected in writing.

Game Board



Picture 4.7 Game Board Before Revision



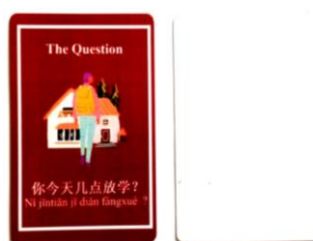
Picture 4.8 Game Board After Revision

The plots on the game board before the revision were not all filled with vocabulary there were some plots that were left empty, so the validator suggested filling in the empty plots using vocabulary contained in the material so that all the plots on the game board were filled.

Game Card



Picture 4.9 Question Card Before Revision



Picture 4.10 Question Card After Revision



Picture 4.11 Vocabulary Card Before Revision



Picture 4.12 Vocabulary Card After Revision



Picture 4.13 Bonus Card Before Revision



Picture 4.14 Bonus Card After Revision



Picture 4.15 Punishment Card Before Revision



Picture 4.16 Punishment Card After Revision



Picture 4.17 Game Guide before revision



Pitcure 4.18 Game Guide After revision

The card component in the game before revision used HVS paper, so the validator suggested changing the card material using Ivory paper. While the game guide before the revision had several typos or errors in writing, so the validator asked to be checked and corrected in writing.

CONCLUSION

Based on the results of the research that has been done, namely about development of learning media based on car racing games in Mandarin subjects for class X Pangudi Luhur Don Bosko High School Semarang So it can be concluded that the development of media to memorize vocabulary and to train students' skills in making sentences is really needed considering the lack of learning media in schools. Based on the analysis of students' needs, it shows that students want creative, innovative and fun learning, so that learning in the classroom is relaxed but can still run well and the material provided by the teacher can be received well by students.

The results of the validation activities that have been carried out show that development of learning media based on car racing games in Mandarin subjects for class X Pangudi Luhur Don Bosko High School obtained an overall average score of 87 from media experts on the media aspect, which means that the media that has been made is in the very feasible category. The results of the material experts get an overall average score of 87.4 which can be interpreted as the material contained in the media is in the very feasible category. The suggestions and feedback for media improvements are as follows: (1) Fill in the empty plots with vocabulary so that all plots are filled and there are no empty plots. (2) Change the card material from HVS paper to Ivory paper or laminated HVS paper. (3) Correcting typos or errors in writing.

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Anggi Novita Sari Prasetyo dkk. / Longda Xiaokan: Journal of Mandarin Learning and Teaching 6 (1) (2023)

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