



Development of The Word Candy Game as a Media to Improve Chinese Vocabulary

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Keywords

Development, Word Candy, Game, Chinese Languages

Abstract

This research is motivated by the learning media in the Chuji Hanyu Xiezu Shang class which not yet using learning media in the form of games, this makes an opportunity to develop new innovations to support teaching and learning activities in the form of Word Candy game to improve mastery of chinese vocabulary. The objectives of this research are: 1) Describes the needs of students for Word Candy media in improving vocabulary mastery, 2) Describes the results of the prototype development of Word Candy media in mastering Chinese, 3) Describes the results of expert validation of Word Candy media in mastering vocabulary in learning Chinese. This study uses the Research and Development (R&D) method with five stages, namely: 1) potential and problems, 2) data collection, 3) product design, 4) design validation, and 5) design revision. Based on the needs analysis, it shows that Word Candy media is approved as a learning medium by both lecturers and students. Proven by the results of validation from media experts getting an average value of 88.4 with a score of 4 which is said that this media is very feasible to use, while validation from material experts shows an average value of 88.5 with a score of 4 which is included in the category of very feasible/appropriate to use as a learning medium. After that, the media was improved according to the suggestions given by media experts and material experts.

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INTRODUCTION

The development of foreign languages in Indonesia is increasing rapidly, this is indicated not only by the large number of enthusiasts but also by the increasing number of course institutions that are being established to meet this need. (Fantini & Tamba, 2020) In addition to English which has been in great demand for a long time, now Chinese is also starting to have many enthusiasts in line with the increasing need for human resources who are able to speak Chinese in the world of work. Chinese is indeed known to be complicated, both in terms of writing and pronunciation. This is because Chinese is still less familiar to the ears of the Indonesian people. Even though it is a difficult language, in reality Chinese is one of the foreign languages that is worth learning in this day and age. (Winda Br Barus & Rudiansyah, nd).

In the current era of globalization, China is an important actor on the world globalization stage because it has achieved a very impressive level of development, this makes Chinese an international language that is widely studied by many countries. (Poerwanto, 2020)

In line with Poerwanto's statement above, the increasing number of foreign investors and businessmen in Indonesia come from China. This is what drives the increasing need for energy sources human resources who can master Chinese. At this time there are still few people who can master Chinese, this will be a great opportunity especially for the Indonesian people. As said (Wijaya, 2020), In the era of globalization, foreign languages have become an unavoidable necessity. Looking at the progress of China, it can be said that currently Chinese has become a necessity in communicating, especially in the business sector.

Based on the author's learning experience at Universitas Negeri Semarang, Chinese language learning in elementary classes at Universitas Negeri Semarang is fairly good, in addition to using domestic lecturers as educators, the university also brings in native speakers to maximize understanding of the material, however, lecturers only explain according to the material to be taught using textbooks and PPT, there is no game media that can support increased vocabulary understanding. Lecturers hope that students will be more independent regarding vocabulary mastery because they consider it a necessity for every student to explore vocabulary more widely. This is a problem for students who only rely on memorized vocabulary given by the lecturer. So when students encounter hanzi outside of the memorization material, they may not be able to read and understand it. Through the results of the questionnaire that the author has given to students in the first semester of the 2024 academic year at Universitas Negeri Semarang, 80.7% of students have difficulty memorizing and reading hanzi, especially in hanzi that has two characters.

With the learning experience and the results of the questionnaire from the students, the researcher concluded that learning media is needed in mastering vocabulary. As an educator, you must have creativity and innovation. Therefore, researchers developed learning media in the form of Word

Candy to provide more enthusiasm and enthusiasm in learning vocabulary.

Learning media functions as an intermediary, tool, and means for the learning process to change students into creative and dynamic learners. Media can also help learners shape their learning experiences. One of the adjustment factors related to teaching is learning media that needs to be learned and mastered by teachers so that they can deliver learning materials. (Dita, 2022).

Learning media can improve the quality of student learning, thereby increasing interest in the learning media used and subsequently increasing student learning motivation. Learning media is anything that can convey messages, can stimulate the thoughts, feelings and desires of students so that it can encourage the creation of a learning process in students.(Luh & Ekayani, 2021).By using educational resources in the form of toys, students are encouraged and motivated to learn Chinese, and facilitate students in vocabulary learning. Vocabulary plays an important role in mastering a language, good and correct vocabulary greatly affects language skills. Because with the existence of educational media, it adds to the appeal and is not easily bored for students.

The Word Candy game media is a media used by educators to elementary school students to master vocabulary, in this case syllable segmentation, which later students are asked to arrange the syllables into a correct word. This Word Candy media can also be adopted and innovated as a medium for learning vocabulary in Chinese, but it does not apply to all words but only applies to words consisting of two characters. This media will later be made using Adobe Flash which is designed in the form of a candy where on the right and left sides there will be a place for character segmentation in a word and in the middle there will also be a place for the results/meaning of the intended vocabulary. How to play it is also very easy, students only need to arrange two hanzi characters to make a word that has meaning. This Word Candy media will make it easier for students to remember and read vocabulary.

Based on the background above, therefore the researcher will apply this Word Candy media to learn Chinese so that students are more interested in learning, especially vocabulary. The researcher developed this game because the learning media has never been used and applied in learning Chinese.

METHOD

This study uses the Research and Development research method. Research and Development (R&D) is a research method used to produce certain products and test the effectiveness of the method. In the field of Education, research and development or Research and Development (R&D) is a research method used to develop or validate products used in Education and Learning (Saleh & Syahrudin, 2023). According to Sugiyono (Friendly, 2023) There are 10 stages in conducting R&D research, namely: 1) potential and problems, 2) collecting information, 3) product design, 4) design validation, 5) design improvement, 6) product trial, 7) product revision, 8) usage trial, 9) product revision, 10)

mass production of the product. However, this research was only carried out up to stage 5, due to time and cost limitations.

RESULTS AND DISCUSSION

In accordance with the needs analysis with observations, questionnaires, and interviews on the development of Word Candy, it can be concluded that lecturers and students of Chinese Language Education at Universitas Negeri Semarang agree with the development of Word Candy media to improve understanding of Chinese vocabulary.

Word Candy Prototype Design Results

The development of this Word Candy media was made with a design that was in accordance with the results of the needs analysis from lecturer interviews and student questionnaires. With the following details:

Media Homepage

On the media homepage there are several sections, namely, the media name, the name of the media creator, the sound icon which functions to activate or deactivate the media sound, and the icon **X** which functions as a button to exit the media.



Figure 1 Media homepage

Home Screen View

On the main screen display there are 3 features, namely: 1) how to play, this feature contains an explanation of how to play the Word Candy media, 2) content 1 and 2, this feature contains the main content of the media, namely learning materials.



Figure 2 Media main screen view

Game Instructions

This section contains information about how to play the Word Candy media as a game guide for users.

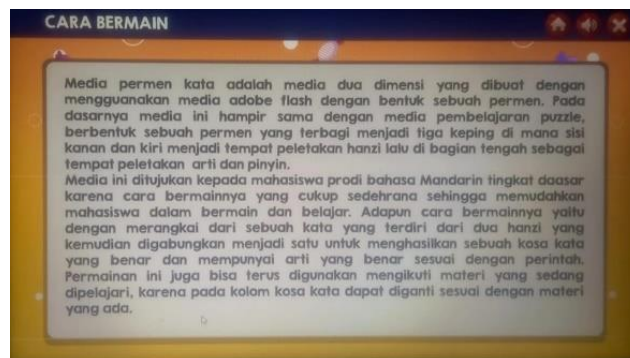


Figure 3 Game instructions

Content

This content is the main part of the Word Candy media. The inside contains learning materials consisting of pinyin and hanzi which are randomly located.



Figure 4 Content

How to play Word Candy media there are several steps, namely: 1) the player opens the main content, 2) selects pinyin at the bottom of the screen, 3) selects hanzi characters to fill the two empty parts of the

candy image. This Word Candy media is made using the abobe flash software platform, because it is easy to operate and has complete features that are suitable for the Word Candy media being developed.

Validation Results

After completing the media development, the next step is validation. In this section, the validation results from media experts and material experts will be presented. The assessment categories are as follows:

Table 1 Word Candy assessment categories

Score	Value Range	Category
4	86-100	Very worthy/very suitable
3	71-85	Suitable
2	56-70	Not suitable/not appropriate
1	41-55	Totally unsuitable/totally unsuitable

Media Expert Validation

Validation of media design was conducted by Mrs. Ria Riski Marsuki, S.S, MTCSOL as a lecturer in Chinese Language Education at Universitas Negeri Semarang. Validation by media experts includes 3 aspects, namely, 1) physical feasibility aspect, 2) media appearance aspect, and 3) media functionality aspect. The following are the validation results from media experts.

Table 2 The results of the validation of Word Candy from media experts

No.	Aspect	Assessment criteria	Score
1	Physical fitness	Materials used	88
		Media durability	89
		Ease of media storage	89
2	Media view	Suitability of media background sound selection	88
		Clarity of instructions for use of media	88
		Media font compatibility	88
		Suitability of color degradation selection	89
3	Media functionality	Ease of use of media	88
		Increase interest in learning	89
		Suitability of qualifications as a learning medium	89
Overall average			88.4

Based on the table above, it can be concluded that the Word Candy media obtained an overall average score of 88.4 from media experts, which is included in the very appropriate/very feasible category (score 4) as a learning medium. This shows that the Word Candy media is very feasible to use, both in terms of physical feasibility, media appearance, or media functionality.

Material Expert Validation

Validation of the material product design was carried out by Mrs. Ria Riski Marsuki, S.S, MTCSOL as a lecturer in Chinese Language Education at Universitas Negeri Semarang. This validation includes 3 aspects, namely, 1) content feasibility aspect, 2) media presentation aspect and, 3) graphic aspect. The following is a summary of the validation results from material experts.

Table 3 Summary of validation of Word Candy media by material experts

No.	Aspect	Assessment criteria	Score
1	Content suitability	Suitability of materials to needs	88
		Accuracy of material	89
		Completeness of materials	89
		The accuracy of the material with the media developed	89
2	Media presentation	Ease of understanding the material	88
		Encourage interest in learning	89
		Helping students understand the material	88
		Presentation of interesting material	88
		Stimulate curiosity	89
3	Language	Ease of understanding the flow of material	88
Overall average			88.5

From the table above, it can be concluded that the Word Candy media obtained an average score of 88.5 where this score is included in the very appropriate category (score 4) with a value range of 85-100. This shows that the Word Candy media is very appropriate to be used as a learning medium, both in terms of the appropriateness of the content, media presentation, and language aspects.

Word Candy Media Improvement

After the prototype has been validated by the expert, the next step is to improve it according to the suggestions and inputs that have been given by the expert. Some of the suggestions that have been given are as follows: 1) Adding sound effects for reading on the media when the answer is correct, 2) Improvements to the select answer button, 3) Bug fixes, 4) Changing the arrangement between hanzi and pinyin to be more varied.

Added Sound Effects

Experts suggest adding sound effects to correct answers, this aims to ensure that users know how to pronounce the character correctly.

Improvements to the Select Answer Button

In the previous design, the button to select the answer could function according to the command when dragged. This caused the media to be ineffective because it was a little difficult to operate. Therefore, experts suggest that the answer selection button mechanism be changed to be simpler by changing it from being dragged to one click.

Bug Fixes

There is a bug on one side of the selected answer that causes the correct answer to appear by itself before the answer on the other side is selected.



Figure 5 Before



Figure 6 After

Change of Order

As a form of variation, experts suggest changing the layout between hanzi and pinyin on the next game slide. This is intended so that users do not get bored because of the monotony of the media design.

CONCLUSION

Based on the results of research on the development of Word Candy learning media to improve vocabulary mastery in Chuji Hanyu Xiezu Shang class, then it can be concluded that this development is very much needed. In its development, researchers use Adobe Flash as media material, with the aim of flexibility between the media and the material to be taught.

Results validation from media experts shows that the Word Candy media obtained an overall average score of 88.4 from media experts, which is included in the very appropriate/very feasible category (score

4) as a learning medium. This shows that the Word Candy media is very feasible to use. The validation results from material experts show that the Word Candy media obtained an average score of 88.5 where this score is included in the very appropriate category (score 4) with a value range of 85-100. This shows that the Word Candy media is very suitable for use as a learning medium. The suggestions given by the experts are as follows: 1) Adding sound effects for reading on the media when the answer is correct, 2) Fixing the answer selection button, 3) Fixing bugs, 4) Changing the arrangement between hanzi and pinyin to make it more varied.

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