

Development of Video Based Interactive Learning *Computer Assist Language Learning (CALL)* to Improve Arabic Language Proficiency for Class IX MTsN 4 Bogor

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ABSTRACT

Language is very much used to communicate; mother tongue is the first language mastered by a person. Meanwhile, a second language needs to be learned to be able to master it. At MTsN 4 Bogor, the second language included in the subjects is Arabic. Of the four competencies that must be mastered, there is one competency that is considered difficult to master, namely the competency to speak Arabic. To improve students' speaking competence, researchers developed Interactive Learning Videos. So the research method used is Research and Development (R&D). From the research results, it was found that interactive learning videos can be accessed offline and can be used on computers in the Language Laboratory room. For the test results of learning materials, learning media and learning design, the respective results obtained were {93.04%, 91% and 93%}, where the respective expert test results were included in the very valid category. Meanwhile, the results of calculating the effectiveness of interactive learning videos obtained a result of 84.32%, which indicates that interactive learning videos are effective for improving Arabic speaking skills.

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Introduction

Mother tongue is the language that is first received as a child. In the context of learning. A second language can be acquired after mastering the mother tongue well. Mastery of a second language can be obtained through natural means, that is, if someone socializes or lives in an area that is different from their mother tongue, apart from that, it can also be done through formal learning, namely by attending a course institution either online. *online* nor *offline*. In the State Madrasah Tsanawiyah environment, learning Arabic is outlined in the Regulation of the Director General of Basic Education Number 3302 of 2024, which states that learning Arabic in madrasas has the aim of preparing students to have the ability to use Arabic as a global communication tool and a tool for studying religion from authentic sources which generally use Arabic and through a scientific chain

process (isnad) which continues to be connected to the original source, namely the Al-Qur'an and Hadith (Ministry of Religion, 2024). To communicate effectively both verbally and in writing, language skills are required, namely listening skills (*estimate*), speak (*kalam*), reading/viewing (*qiro'ah-al-mu'ayanah*) and writing/presenting (*kitabah-at-taqaddumah*).

The process of learning Arabic in formal schools such as madrasas is faced with quite complex challenges. These challenges arise from various factors, including linguistic, psycholinguistic and carrying capacity factors. At MTsN 4 Bogor, challenges were also encountered in student learning outcomes through initial research analysis, namely the Arabic language teacher stated that listening and speaking skills were in the range of 21-40 (poor) and 41-60 (developing in a good direction). In contrast, reading and viewing skills are in the range of 41-60 (developing in a good direction) and 41-80 (good). Meanwhile, writing-presentation skills are in the range of 21-40 (less). This is in line with the researchers' initial findings when reflecting on learning in semester 1 of the 2024/2025 academic year, namely speaking proficiency was 80.9%, writing-viewing was 79.9%, listening was 44.5%, and reading was 44% of the 414 respondents.

From the results of preliminary research, the skill gap in learning Arabic is caused by a lack of attention to skills *estimation* and *kalam*, lack of variety in learning which is limited to learning methods, techniques and media that are less interesting and less effective in improving learning outcomes, language learning environment (*bi'ah lughowiyah*) which has not been supported and developed, apart from that, students' interest, courage to express and initial readiness in language, especially speaking skills (*kalam*) still lack motivation.

To support the learning process, the use of media can ensure better understanding in students, because the use of media can trigger emotional and mental involvement (Mutiar, et al., 2022). Apart from that, the presence of media can clarify information during face-to-face time as well as enrich it, increase effectiveness and efficiency, add variety, and provide a broader horizon than what educators provide without media, concretize abstract material, and increase students' attention span (Sudarsono, et al., 2018). Apart from the need for media to facilitate learning, it is also very important to have facilities such as language laboratories available to support the foreign language learning process so that it can be maximized. In the MTsN 4 Bogor language laboratory, there are *Personal Computer* embedded application *linguist* form *software* which connects educators and students or between students to interact. By using *linguist* On the computer in the language laboratory, learning interactions can be carried out personally between educators and students, because everything from delivering material to collecting assignments can be sent directly to the teacher's computer, minimizing the feeling of embarrassment and fear of saying something wrong. Computer-assisted language learning or what is currently known as Integrative Computer Assisted Language Learning (CALL) which combines multimedia and the internet as learning media and resources (Effendi, 2012).

Therefore, this research will focus on developing video-based interactive learning *computer assist language learning* to improve Arabic speaking skills in class IX at MTsN 4 Bogor.

Method

Research Design

The research method used is Research and Development or R&D, where this method is used to carry out research and product development which is then tested to determine the effectiveness of a product that has gone through the development process (Son, 2023). The product developed in this research is an interactive learning video, and the model developed is the Hannafin and Peck, 1988 development model. In this model, assessment and repetition need to be carried out in each phase. This model is a product-

oriented instructional design model. The following section shows the three main phases in the Hannafin and Peck model.

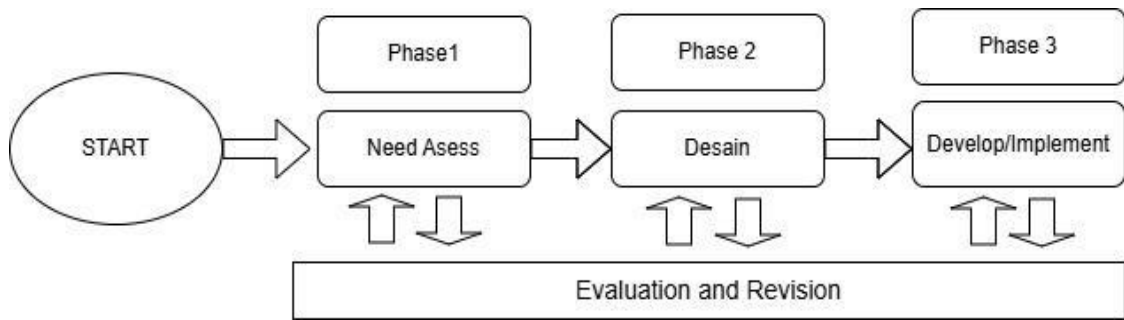


Figure 1. Model Hannafin and Peck

Based on Figure 1. The Hannafin and Peck model consists of three phases. To implement the procedures for developing interactive learning videos, the following is a table of procedures used by researchers:

Table 1. Procedures for Implementing the Hannafin and Peck Development Model

	Draft	Procedure	Results
Phase 1 (Need Assess)	Identifying needs in developing learning media	1. Identify learning objectives 2. Identify the objectivity of learning media 3. Identify students' initial knowledge	Analysis conclusion
Phase 2 (Design)	Design interactive learning videos	1. Make <i>story board</i>	Initial plan for interactive learning videos
Phase 3 (Development and Implementation)	Develop and implement learning videos and implement them in small groups and large groups	1. Produce <i>flowchart</i> 2. Developing products 3. Expert trial 4. Revision 5. Small group trials 6. Revision 7. Large group trials	Development and implementation of interactive learning videos

The Hannafin and Peck development model is a teaching design model that consists of three phases, namely the requirements analysis phase, the design phase, and the development and implementation phase (Hannafin & Peck, 1988). In this model, assessment and repetition need to be carried out in each phase.

Participation

The subjects of this research were 312 grade 9 students at MTsN 4 Bogor for the 2024/2025 academic year. The sample selection used a stratified random sampling technique of 10% of the population. This 10% determination is based on the opinion of Prof. Dr, Zainal Abidin Arief (Arief, 2014).

Data Collection Techniques

The data collection techniques used in this research consisted of observation, interviews, distribution of questionnaires, and documentation. Initial observations were carried out to collect data and make careful observations. From observations, MTsN 4 Bogor has complete facilities and infrastructure such as a language laboratory to support language subjects, such as English, Indonesian and Arabic. A language laboratory is also equipped *personal computer*. Next, the researcher conducted interviews to collect initial information regarding the gaps that occurred in the learning process at MTsN 4 Bogor. From interviews conducted with Arabic language subject teachers, there are gaps in the learning media used and what is needed, the results of the interview analysis are as in Table 2 below:

Table 2. Results of Interviews with Arabic Subject Teachers

No	Question	Answer
1	Do teachers often teach in the classroom or in the language laboratory during Arabic lessons?	Yes, when studying Arabic, I often use the language laboratory room. Because in the language laboratory there are computers on which the software has been downloaded <i>linguist</i> which can be used to support Arabic language learning. It's just that the software cannot be used 100%, because it has not been filled with adequate learning content.
2	To practice Arabic, what competencies must students master first? And are there competencies that are difficult for students to master?	In teaching Arabic, the first thing that students can master is reading skills. Because reading skills can be acquired by students through TPA or taklim meetings or formal schools (MI). In the case of MTsN 4 Bogor, a competency that is currently difficult for students to master is speaking Arabic.
3	When learning Arabic, are there any obstacles to the learning process?	In the learning process, students still feel embarrassed and afraid of making mistakes when speaking Arabic. Application <i>linguist</i> The computers in the language laboratory have not been utilized optimally, because there is no material content that supports learning activities.

Based on point 2 in Table 2, it was strengthened by the results of the questionnaire distributed by the researchers, and obtained the following analysis results: a reflection on learning was carried out in semester 1 of the 2024/2025 academic year which was responded to by 414 students. This reflection highlights four aspects of language proficiency and the following information is obtained; listening and speaking skills, as many as 183 students (44.5%) stated that they had difficulty grasping new vocabulary (*istima'*) and 332 students (80.9%) stated that they had difficulty pronouncing words in Arabic (*kalam*). In the aspect of reading-viewing skills, 181 students (44%) stated that it was difficult to read texts without *harakat* (*qira'ah*), while in the aspect of writing-presentation skills, 325 students (79.9%) stated that it was difficult to write Arabic and make simple paragraphs (*kitabah*). Based on this data, it can be concluded that the level of difficulty in Arabic language proficiency for students at MTs.N 4 Bogor is sequentially; speaking proficiency was 80.9%, writing-viewing was 79.9%, listening was 44.5%, and reading was 44% of the respondents.

Then to find out the qualifications of the products developed and tested by experts, the following percentages are used:

$$\text{Percentage (\%)} = \frac{\Sigma x}{SMI} \times 100$$

Table 3. Product Eligibility Criteria

Achievement Level	Qualification	Information
90% - 100%	Very good	No need to revise
75% - 89%	Good	Revised as necessary
65% - 74%	Enough	Quite a lot of revisions
55% - 64%	Not good	Much revised
0% - 54%	Very not good	Totally revised

Source: Sugiyono (2018)

To test the effectiveness of the product, researchers used pre-test and post-test analysis tests with tests *Normalized Gain Score*. With a formula like the following:

$$N - \text{Gain} = \frac{\text{post test scores} - \text{pre test scores}}{\text{maximum score} - \text{pre-test score}}$$

And here are the categories according to level through calculation results:

Table 4. Kategori N-Gain

Achievement Level	Qualification
$g > 0.7$	High
$0.3 \leq g \leq 0.7$	Currently
$g < 0.3$	Low

Source: Hake, 1999

Then the results obtained by N-Gain are converted into a percentage, namely multiplied by 100. The percentage results are defined based on the effectiveness of the learning activities, namely as follows:

Table 5. N-Gain Value Conversion

Achievement Level	Qualification
< 40	Ineffective
40 - 56	Less effective
56 - 75	Quite effective
>76	Effective

Source: Hake, 1999

Results

Phase 1 Needs Analysis

Based on the initial survey and results of learning reflections at MTs.N 4 Bogor, it was found that 80.9% of class IX students experienced difficulties in speaking Arabic proficiency. The main challenges come from the lack of variety in technology-based learning media, teaching methods that still rely on conventional lectures, and a linguistic environment (bi'ah lughowiyah) that is less supportive. Students have difficulty pronouncing new vocabulary and building simple conversational interactions, which is

exacerbated by the absence of interactive learning media that combines audiovisual elements and contextual simulations. Apart from that, even though the school has a language laboratory with the Linguist application, its use is not optimal because it is limited to basic communication features without integration of learning materials that are in accordance with the curriculum. This shows that there is an urgent need to develop media that is not only visually attractive but also capable of providing personal and adaptive speaking practice.

Another need identified is the characteristics of students who are more responsive to technology-based content and independent learning. Lack of courage to express oneself due to shame or fear of making a mistake is a major obstacle to the practice of kalam. Therefore, media is needed that utilizes Computer-Assisted Language Learning (CALL) technology to create a safe, interactive and contextual learning environment. The integration of interactive videos with conversation simulation features, audio quizzes, and Arabic cultural visualizations is expected to increase motivation, reduce anxiety, and strengthen linguistic and pragmatic understanding. This analysis also emphasizes the importance of aligning media with the Merdeka Curriculum Learning Outcomes, especially the kalam element, as well as utilizing the available language laboratory infrastructure to ensure the sustainability and effectiveness of implementation.

Instructional analysis is an important step in designing effective learning media, especially in the context of developing CALL-based interactive learning videos. In Hannafin and Peck's model, instructional analysis begins with a needs analysis phase, in which developers must identify clear and specific learning objectives. This includes an understanding of the characteristics of students, the initial knowledge they have, as well as their needs and expectations for learning media. With this information, developers can design relevant and engaging content, and select appropriate teaching strategies to achieve the stated learning objectives.

Phase 2 Design

Next, the design phase in instructional analysis focuses on developing pedagogical principles that will be applied in the instructional video. This includes creating storyboards that document the sequence of teaching activities and expected interactions between learners and the media. In this phase, it is important to consider interactive elements that can increase student engagement, such as quizzes, discussions, and live feedback.

Based on the Arabic language learning material scheme above, the aim is for students to gain knowledge about numbers. It is described more fully as follows:

1. Students are able to recite and memorize vocabulary from several mufradat related to the theme beauty nature correctly.
2. Students are able to imitate simple expressions to state, ask and respond in dialogue texts either without text (memorization) or with about text beauty nature well in accordance with linguistic rules.

The objectives of the CALL-based learning video for Arabic subjects in class IX semester 2 are:

1. Siwa is able Students are able to recite and memorize vocabulary from several mufradat related to the theme beauty nature correctly.
2. Students are able to imitate simple expressions to state, ask and respond in dialogue texts either without text (memorization) or with about text beauty nature well in accordance with linguistic rules.

Phase 3 Development and Implementation

Once the design is complete, the development and implementation phase is carried out, where the learning media is produced and tested to ensure that all elements function properly and meet the learning objectives. Formative and summative evaluation

processes are also implemented to assess the effectiveness of the media and make necessary improvements, so that interactive learning videos can provide an optimal learning experience for students.

In developing interactive learning videos, researchers used the unsplash.com and mixkit.com applications to obtain video materials, the filmmora application to edit videos, and the elevenlabs.io application to edit video sound. Furthermore, this interactive learning video can be used offline on a computer in the Language Laboratory.

Before the development of the Arabic language learning video is implemented, an expert review is carried out by experts. This trial by experts aims to assess the feasibility of products resulting from blended learning development from the aspects of material, media and learning design using assessment instruments based on guidelines for implementing learning media evaluation (Siregar & Hadiansyah, 2018). The results of the review from experts are as follows:

Table 6. Validity Results by Learning Material Experts

No	Validity Variables	Validity Value	Criteria
1	Didactic Terms	88,89%	Valid
2	Construction Requirements	95,71%	Very valid
Overall Ideal Percentage		93,04%	Very valid

Source: Researcher, 2025

The results of data analysis from learning material experts show that the CALL-based Arabic language learning video development that was developed received a very valid category with an ideal percentage of 93.04%. The results of this assessment show that the development of CALL-based Arabic learning videos has been tested and declared valid by validators so that they can be used as learning media.

The validity results from learning material experts per indicator analyzed quantitatively can be explained as follows: 1) Based on the didactic aspect, it was found that the development of CALL-based Arabic learning videos is in the valid category with an ideal percentage of 88.89%. 2) Based on the material construction aspect in developing CALL-based Arabic learning videos, it is in the very valid category with an ideal percentage of 95.23%.

Table 7. Validity Results by Learning Media Experts

No	Validity Variables	Validity Value	Criteria
1	Media Display	88,00%	Valid
2	Product Quality	95,56%	Very valid
3	Media Instructions Layout	80,00%	Valid
Overall Ideal Percentage		91%	Very Valid

Source: Researcher, 2025

The results of validity data analysis from learning media experts show that the development of CALL-based Arabic learning videos which were developed based on technical requirements received a valid category with an ideal percentage of 91.00%. The results of this assessment show that the development of CALL-based Arabic learning videos has been tested and declared valid by validators so that they can be used as learning media.

The validity results carried out by learning media experts per indicator analyzed quantitatively can be explained as follows: 1) Based on the media display, it was found that the development of CALL-based Arabic learning videos achieved 88.00% ideality with a valid category. 2) Based on the product quality aspect, it was found that the development of CALL-based Arabic learning videos received 95.56% ideality in the very valid category.

3) Based on the layout aspect of the media instructions, it was found that the development of CALL-based Arabic learning videos received 80.00% ideality in the valid category.

Table 8. Validity Results by Learning Design Experts

No	Validity Variables	Validity Value	Criteria
1	Aspects of Needs Analysis	85,00%	Valid
2	Learning Design Aspects	97,67%	Very valid
3	Product Development Aspects	90,00%	Very valid
4	Usage Aspects	100%	Very valid
5	Assessment Aspects	100%	Very valid
Overall Ideal Percentage		93%	Very Valid

Source: Researcher, 2025

The results of validity data analysis from learning design experts show that the development of CALL-based Arabic learning videos which were developed based on technical requirements received a valid category with an ideal percentage of 93.00%. The results of this assessment show that the development of CALL-based Arabic learning videos has been tested and declared valid by validators so that they can be used as learning media.

The validity results carried out by learning media experts per indicator analyzed quantitatively can be explained as follows: 1) Based on the Needs Analysis, it was found that the development of CALL-based Arabic language learning videos achieved 85.00% ideality in the valid category. 2) Based on the Learning Design, it was found that the development of CALL-based Arabic learning videos received 97.67% ideality in the very valid category. 3) Based on the Product Development aspect, it was found that the development of CALL-based Arabic learning videos received 90.00% ideality in the very valid category. 4) Based on the Usage aspect, it was found that the development of CALL-based Arabic learning videos received 100.00% ideality with a very valid category. 5) Based on the assessment aspect, it was found that the development of CALL-based Arabic learning videos received 100.00% ideality in the very valid category.

After carrying out feasibility tests by experts and carrying out several revisions according to each expert's suggestions, the researchers then carried out field trials starting from one to one trials, small group trials, and large group trials to determine the feasibility of interactive learning videos.

Table 9. One to One Test Analysis Results

No	Validity Variables	Validity Value	Criteria
1	Student Interest and Display of Interactive Learning Videos	92.38%	Very good
2	Usage Process	83,33%	Good
3	Computer model	96,67%	Very good
4	Time	100%	Very good
Overall Ideal Percentage		91,33%	Very good

Source: Researcher, 2025

The results of the one to one test data analysis show that the development of the CALL-based Arabic language learning video that was developed received a very practical category with an ideal percentage of 91.33%. The results of this assessment show that the development of CALL-based Arabic learning videos is feasible and is stated to have been tested by 3 students so that it can be used as a learning medium on a more advanced scale.

The practicality results of the one to one student test per indicator analyzed quantitatively can be explained as follows: 1) Based on aspects of student interest and the

appearance of the Android-based CALL-based Arabic language learning video development, it is in the very good category with an ideal percentage of 92.38%. 2) Based on aspects of the usage process, it was found that the development of CALL-based Arabic learning videos was in the good category with an ideal percentage of 83.33%. 3) Based on the aspects of the CALL-based Arabic language learning video development model, it is in the very good category with an ideal percentage of 96.67%. 4) Based on the learning video processing time indicator, it was found that the CALL-based Arabic learning video developed was in the very good category with an ideal percentage of 94.29%. Thus, the time provided for working on learning videos is sufficient.

Table 10. Small Group Analysis Results

No	Validity Variables	Validity Value	Criteria
1	Student Interests and Video Views	93,88%	Very good
2	Usage Process	93,33%	Very good
3	Computer model	95,71%	Very good
4	Time	97,14%	Very good
Overall Ideal Percentage		94,43%	Very good

Source: Researcher, 2025

The results of the analysis of small group test data show that the CALL-based Arabic language learning video development that was developed received a very good category with an ideal percentage of 94.43%. The results of this assessment show that the development of CALL-based Arabic learning videos is feasible and was stated by 7 students so that it can be used as a learning medium on a larger scale.

The results of the small group test of student indicators which were analyzed quantitatively can be explained as follows: 1) Based on aspects of student interest and the display of learning videos, it was found that the development of CALL-based Arabic learning videos was in the very good category with an ideal percentage of 93.88%. 2) Based on the usage process aspect, it was found that the development of CALL-based Arabic learning videos is in the very good category with an ideal percentage of 93.33%. 3) Based on aspects of the Android learning video model, it was found that the development of CALL-based Arabic learning videos is in the very good category with an ideal percentage of 95.71%. 4) Based on the learning video processing time indicator, it was found that the CALL-based Arabic learning video developed was in the very good category with an ideal percentage of 97.14%. Thus, the time provided for working on learning videos is sufficient.

Table 11. Results of Large Group Analysis

No	Validity Variables	Validity Value	Criteria
1	Student Interest and Video Views	95,17%	Very good
2	Usage Process	95,06%	Very good
3	Computer model	94,60%	Very good
4	Time	93,10%	Very good
Overall Ideal Percentage		94,86%	Very good

Source: Researcher, 2025

The results of the analysis of large group test data show that the CALL-based Arabic language learning video development that was developed received a very good category with an ideal percentage of 94.86%. The results of this assessment show that the development of CALL-based Arabic learning videos is feasible and stated by 30 students that they can be used as learning media on a larger scale.

The results of the large group test of student indicators which were analyzed quantitatively can be explained as follows: 1) Based on aspects of student interest and the

appearance of learning videos, it was found that the development of CALL-based Arabic learning videos was in the very good category with an ideal percentage of 95.17%. 2) Based on the usage process aspect, it was found that the development of CALL-based Arabic learning videos is in the very good category with an ideal percentage of 95.06%. 3) Based on aspects of the Android learning video model, it was found that the development of CALL-based Arabic learning videos is in the very good category with an ideal percentage of 94.60%. 4) Based on the learning video processing time indicator, it is sufficient to find that the CALL-based Arabic learning video developed is in the very good category with an ideal percentage of 93.10%. Thus, the time provided for working on learning videos is sufficient

After conducting a feasibility test of the interactive learning video, the researchers conducted an effectiveness test on 30 students of class 9 at MTsN 4 Bogor. The effectiveness test calculation uses pre-test and post-test questions in the form of an assessment rubric. Data calculations use the N-Gain Test, the following calculation results are obtained:

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Ngain_score	30	.54	1.00	.8432	.11853
Ngain_percent	30	53.85	100.00	84.3246	11.85341
Valid N (listwise)	30				

Figure 2. Effectiveness Test Calculation Results

Based on the results of the N-Gain calculation, the average N-Gain value was 84.32%. If converted using the table, the percentage is 84.32% and is categorized as "effective". So it can be said that this interactive learning video for class IX Arabic at MTsN 4 Bogor is effective to use and improves students' speaking skills.

Discussion

At this stage the research and processing results will be discussed in more detail to see the achievements and limitations of the research processing results. After students are given learning using CALL-based Arabic language learning video development, at the end of the lesson students are given a posttest to determine the effectiveness of the learning video developed in improving Arabic language skills.

The rubric instrument used in this assessment includes six critical aspects: accuracy of questions/pronunciation, accuracy of answers/pronunciation, makhraj, intonation, expression, and fluency. Each aspect is evaluated on a scale of 1–4, resulting in a maximum score of 24. This rubric is comprehensively designed to assess verbal communication skills holistically, ensuring that the assessment does not only focus on technical aspects such as pronunciation, but also on non-verbal factors such as expression and fluency. This structure provides an objective framework that facilitates the evaluation of student development before and after the learning intervention.

Second, the pre-test results showed that the majority of students (28 out of 30 respondents) had not reached the completion criteria with an average score of 42. Only two students (R9 and R29) completed the initial stage immediately. The low pre-test score indicates that the student's initial abilities in the aspects assessed are still less than optimal, especially in pronunciation accuracy and speech fluency. This is the basis for the need for intervention or more structured learning methods to improve these competencies.

Third, a significant increase was seen in the post-test results with an average score of 87 and 29 students were declared complete. Only one student (R8) remained incomplete, although his score increased from 35 to 70. This spike indicates that the implemented interventions—such as intensive training, repeated practice, or a rubric-based learning approach—were effective in correcting weaknesses identified in the pre-test. Aspects such as intonation and expression, which may have received less attention previously, seem to receive improvement thanks to targeted assessment through rubrics.

Fourth, the effectiveness of the rubric instrument is reflected in the tool's ability to map student development in detail. For example, students like R28 who initially scored 30 (pre-test) managed to achieve 95 (post-test), or R16 who jumped from 35 to 95. Rubrics not only measure the final results, but also provide specific feedback for each aspect, allowing students and teachers to focus on areas that need improvement.

Fifth, although the results are generally positive, there are several critical notes. Student R8 only achieved a score of 70 on the post-test, which may indicate the need for a different approach or more intensive mentoring. In addition, although the rubric already covers important aspects, the addition of indicators such as interactivity or context of language use in real situations can increase the validity of the instrument in the future.

Finally, overall, this rubric instrument has proven to be effective as an evaluation tool that is able to encourage increased students' verbal communication competence. Comparison of the pre-test and post-test shows that the rubric not only functions as a measuring tool, but also as a learning guide. For optimization, it is recommended to carry out regular evaluations of assessment criteria and provide training for teachers in applying rubrics consistently. Thus, this instrument can continue to be the foundation for improving the quality of learning on an ongoing basis.

This development research certainly has limitations in the development implementation process, so there are still many shortcomings in this research, both in terms of procedures, time, materials, and so on. However, researchers have tried to minimize deficiencies as much as possible. The description of the shortcomings in this research is as follows: 1) The research was only conducted on one population of MTs.N 4 Bogor, it can only be generalized to other schools that have the same characteristics. 2) CALL-based interactive learning videos in Arabic were only tested in one class. Due to limited time, energy and materials, researchers cannot research in a wider field. 3) The material in the CALL-based interactive learning video in Arabic is only limited to chapters. 4) CALL-based interactive learning videos in Arabic have not been registered/submitted to YouTube. So every user who wants to have CALL-based interactive learning videos in Arabic must use the school computer. 5) A special design is needed to connect the formative evaluation in Arabic CALL-based interactive learning videos with menus or other applications to make it more interesting and interactive.

The implications of this research can show that the development of interactive learning videos based on Computer Assisted Language Learning (CALL) has significant potential in improving Arabic speaking and listening skills among students. The results obtained provide an important contribution to language learning practice, especially in the context of madrasah education. By integrating technology and interactive media, the learning process becomes more interesting and effective, thereby increasing student motivation and engagement. This implication can be a reference for educators and curriculum developers to adopt technology in teaching strategies to achieve better results.

Conclusion

Development of interactive learning videos based on computer assisted language learning (CALL) to improve Arabic language proficiency for class IX MTs.N 4 Bogor using the Hannafian and Peck model at the development stage or selecting learning materials. The selection of this model is based on a complete, detailed and systematic consideration

of the process which is integrated with the Hannafin and Peck model which is very specific for system-based products.

The level of feasibility of interactive learning videos based on computer assisted language learning (CALL) to improve Arabic language proficiency is determined based on the results of assessments by learning material experts, learning media experts and learning design experts. The results of learning material expert testing obtained a percentage of 93.04%. For testing by learning media experts, a percentage of 91% was obtained. Testing by instructional design experts obtained a percentage of 93%. Based on the test results of the three experts, this interactive learning video based on computer assisted language learning (CALL) to improve Arabic language proficiency is categorized as 'very good' so it is suitable for use in Arabic language learning for class IX MTs.N 4 Bogor. The development of interactive learning videos based on computer assisted language learning (CALL) to improve Arabic language proficiency on number material was declared very good in one to one trials with a percentage result of 91.33%. The results of the small group trial were with an ideal percentage of 94.43% and in the very good category, while in the large group trial the ideal percentage was 94.86% in the very good category. This shows that interactive learning videos based on computer assisted language learning (CALL) to improve Arabic language proficiency that have been developed can attract students' interest and are easy to use in the learning process.

Testing the effectiveness of the model was obtained based on the results of the N-Gain calculation showing a value of 84.32% or 84.32. Based on the results of these calculations, the development of interactive learning videos based on computer assisted language learning (CALL) to improve Arabic language proficiency for class IX MTs.N 4 Bogor is categorized as effective.

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