Development of Interactive Learning Media Using Teachmint to Improve Arabic Speaking Proficiency of Ma'had Students

Abdullah Sakka[1], Ibnu Rawandhy N. Hula*[2], Hirsan Una[3], Sriwahyuningsih Saleh[4], Chaterina Putri Doni[5], Yousif Abdelmannan Mohamed Godat Arrashedy[6]
[1,2,3]IAIN Sultan Amai Gorontalo, Indonesia
[4,5]Universitas Muhammadiyah Gorontalo, Indonesia
[6]International Institute of Khartoum, Sudan
abdullah@iaingorontalo.ac.id[1] ibnurawandi@iaingorontalo.ac.id*[2],
hirsonibnualqoosim1995@gmail.com[3], sriwahyuningsih@umgo.ac.id[4],
chaterina.doni@umgo.ac.id[5], yousifabdelmannan1988@gmail.com[6]

Abstract
This research aims to develop online-based interactive learning media using the teachmint application to improve students' Arabic speaking proficiency. The research uses the Research and Development method with the ADDIE model (analysis, design, development, implementation, and evaluation). The population of this study is 42 students of Ma'had al-Husain bin Ali UMG, Indonesia. Data collection was obtained through observation, interviews, questionnaires, and tests. The study results show that (1) Needs analysis identifies the need for technology-based interactive learning media to improve speaking proficiency and the need for more development of special media for this proficiency. (2) Media design produces ta'bir material with four marhalah/levels. The complete material starts from the initial menu display to the evaluation. (3) The development results have been validated by 85.71% of media experts, 89.29% of material experts, and 92.86% of linguists with worthy predicates. (4) The implementation results showed that the learning media was feasible and exciting to increase students' mastery of speaking proficiency with a response score of 83.93%. (5) The evaluation results showed an increase in the average score of pre-tests 76.09 and post-test 84.6 with paired samples t-test significance of 0.000 < 0.05. The research contributes to improving the quality of students' learning of Arabic speaking proficiency by developing online-based interactive media.
Keywords: Media Development; Interactive Learning; Teachmint App; Proficiency Arabic Speaking

INTRODUCTION

The advancement of science and technology has taken place rapidly from time to time. In the field of education, educators are required to make updates related to the use of technology in teaching and learning activities. One form of using technology in the learning process is through the development of learning media. (Abdul Razak Mursyid, 2024) The use of learning media in the teaching process is highly recommended to improve the quality of teaching, (Kartini & Putra, 2020). The use of learning media can help educators in delivering material to students. The success of the learning process is largely determined by two main components, namely the teaching method and the learning media used. One of the functions of the media in the teaching and learning process is to increase the stimulation and active involvement of students (Nurlaila et al.,

2023) However, the problem that occurs today, there are still many educators who have not been able to develop interactive learning media optimally. In the teaching and learning process, educators still use slides made with the PowerPoint application and also use textbooks, even using conventional methods. This will certainly cause a sense of saturation for students (Sulistiani et al., 2021) The use of interactive learning media has several advantages. One of them is an integral part of the distance education program. Interactive learning media also has the potential to provide better progress to students, as well as help those who need more attention, (Kependidikan et al., 2021)

The emergence of multimedia and technology has changed the way educators teach and the way students learn. More effective information delivery and communication: Multimedia is the key, (Wardani, 2023) The development of multimedia applications opens up new insights into the learning process, encouraging individuals to generate new information and knowledge in innovative ways including in improving speaking skills, (Kusumodestoni & Wahono, 2022)

Speaking skills are one of the main goals in the teaching of modern languages, including Arabic. (Wahyu Septiningrum & Fauziah, 2021a) The process of learning to speak a foreign language will be easy if learners are actively involved in practicing the language through communication. The saying says "We learn to read by reading, therefore we learn to speak by talking". One of the weaknesses of language teaching methods in Indonesia is the lack of intensive oral training. This results in a lack of students' ability to express their thoughts and feelings orally. For students who study Arabic as a foreign language, they are faced with various obstacles, both linguistic (phonology, vocabulary, sentence structure, and writing) and non-linguistic, (Murtado et al., 2023)

Building Arabic speaking skills must be done through effective communication gates. Because speaking is the main means of establishing mutual communication, it must sometimes be supported by certain media. (Laubaha et al., 2024; Mailani et al., 2022) Media in language learning is a supporting tool in the speaking process, among other things, it functions to (a) provide good speaking models and examples, (b) facilitate practice and feedback, (c) create communicative contexts and situations, and (d) facilitate collaborative learning. Therefore, the media about improving Arabic speaking skills can be more effective and fun for students. (Salman & Septiawati, 2023)

Fauzi stated that Arabic speaking skills are the ability to express ideas, thoughts, and feelings through the articulation of sounds or words to the interlocutor. (Fauzi, 2020) This is due to the view that speaking proficiency emphasizes more on the mutual interaction between speakers and listeners so if Arabic speaking proficiency is to be improved in the context of learning at school, students must be equipped with an adequate amount of vocabulary, grammar, and expression, (Puspita et al., 2023) Mastery of these linguistic aspects will allow students to be able to express their ideas, thoughts, and feelings orally smoothly and precisely, (Harianto, 2020) In addition, Arabic language learning, which is focused on improving speaking proficiency, can also be done by preparing online-based interactive learning media.

Currently, various types of interactive learning media can be used to improve speaking skills, such as *the teachmint* application. This media allows teachers to present learning materials interestingly and interactively so that it can increase students' participation and motivation in learning to master speaking skills. According to the National Education Association (NEA), teachmint media has devices that can be manipulated, heard, seen, and read along with instruments used in learning (Mayasari et

al., 2021) Interactive learning media online with the teachmint application offers the right solution to host effective and efficient virtual classes. This platform allows educators and students to interact easily and interestingly, thereby increasing student motivation and interest in learning, especially in learning Arabic (Danial, 2022)

The advantage of the teachmint application lies in its complete and easy-to-use features, as evidenced by the positive response from its user's advantages of this teachmint application are: 1) can teach live. 2) Make the test directly. 3) create homework for students. 4) creating subject matter. 4) Live chat with students. (Putri et al., 2023)

Although there have been many studies examining the use of online-based interactive learning media to improve Arabic speaking skills, research specifically examining the use of the teachmint application for this purpose is still limited.

The results of observations made at Ma'had Al-Husain Ibn Ali found that most educators use several methods, namely lectures, group discussions, and simulations. Some of the educators use oral and visual language, but students still have difficulty understanding the description of the material presented by the educator. In learning Arabic, especially related to speaking proficiency, students do not understand the meaning of the vocabulary presented, so it is difficult for students to practice the vocabulary in speaking. In addition, lecturers have not used IT-based learning media as a means of supporting improving speaking proficiency. Students urgently need media-based learning innovations, considering that most of them already have laptops and cellphones that allow them to learn to speak Arabic, both online and offline.

To overcome these problems, one of the efforts that can be made is to develop online-based interactive learning media using the Teachmint application. Some of the benefits of developing this learning media include: (a) Teachmint provides features that can make it easier for educators to deliver material interactively, such as videos, animations, and practice questions, (b) Students can learn independently through an online platform, so that they can improve their understanding of Arabic vocabulary and speaking proficiency, (c) The use of IT-based learning media can increase motivation and students' enthusiasm in learning Arabic and (d) Educators can take advantage of the assessment and feedback features in teachmint to monitor the development of students' speaking proficiency (Nurul Atikah Nasution and Muspita Sari, 2024).

The development of online-based interactive learning media using the Teachmint application is expected to help overcome the problems that occur in learning Arabic at Ma'had Al-Husain Ibn Ali-UMG, especially in terms of improving students' speaking skills. Interactive learning is a learning method designed and developed by researchers to create interactive and educational teaching and learning situations (Taufik 2020). This interaction can manifest in various forms, such as questions and answers, discussions, group work, simulations, and educational games. Through active interaction, students are encouraged to be directly involved in the teaching and learning process, build their understanding, and develop creative thinking skills.

The significance of this research lies in the effort to provide an alternative interactive learning media that can increase students' participation and motivation in mastering Arabic speaking proficiency through the teachmint application. Researchers chose this application because it has complete features, is easy to use, and helps overcome the problem of learning students' speaking skills. In addition, this research is important because it can contribute to presenting learning innovations that are by technological developments and the alpha generation.

This research aims to develop online-based interactive learning media using the teachmint application, as well as test its effectiveness in improving the mastery of Arabic speaking proficiency in students. This research is expected to make new contributions to the development of several things: 1) Developing online-based interactive learning media using the Teachmint application to improve the mastery of Arabic speaking proficiency; 2) Validating the results of the design of online-based interactive learning media using the Teachmint application; 3) Testing the effectiveness of using online-based interactive learning media using the teachmint application to improve students' mastery of Arabic speaking proficiency.

METHOD

This type of research uses the Research and Development (R&D) method, which is a basic research activity to meet the needs of users that are designed, developed, implemented, and evaluated. (N. Hula et al., 2021) According to Borg and Gall, (Waruwu, 2024) R&D is a process used to develop and validate educational products (Purnama, 2016) This process includes testing in the field, product revision, and continuous improvement until finally producing a product that is by the goals that have been set pre-set. (Septya Novena PutriAnak Agung Gede Agung, 2023)

This research model uses the Branch scheme developed by Raiser and Molenda with five stages; 1) analysis, 2) design, 3) development, 4) implementation, and 5) evaluation (ADDIE), (Hidayat & Nizar, 2021)

Figure 1. Step One: Analyze Problems And Needs

The needs analysis was carried out by interviewing various parties involved in the Arabic language teaching and learning process, such as students and Arabic lecturers. In addition, the researcher analyzes the needs of the curriculum aspect, so that the media developed is in accordance with the core competencies, basic competencies, competency achievement indicators, semester implementation plan (RPS) (Pertiwi et al., 2022). Second step is product design. At this stage, product design is carried out in several steps. (Al-faruq, 2023) 1) determining the content and structure of the material to be presented, 2) identifying the interactive media needed, such as interactive presentations, interactive videos, or simulations and tests. 3) Designing an attractive and easy-to-use look and interface, 4) integrating the interactive features available on teachmint, such as; (a) Use of multimedia (text, images, audio, video), (b) Interactive quiz or exercise features, (c) Annotation and markup features on content, (d) Discussion and collaboration features and f) Storyboard development to ensure that the learning media developed is by the learning objectives that have been formulated (Hamidi & Jamaluddin, 2023). At this stage, the researcher involves design experts as collaborative partners and design consultants to

ensure that the design results are appropriate or not, as well as tasked with providing suggestions, inputs, and notes for the improvement and refinement of media design so that the design results are more attractive, intuitive, and effective in supporting the learning process. The results of the input and improvement notes are used as consideration to revise and improve the product design.

Third Step: Development; at this stage, the researcher carried out several development steps. (Nurhabibah et al., 2021)a) Storyboard Development: Create a storyboard that describes the flow, layout, and content of interactive learning media, and ensure that the storyboard is by the learning objectives that have been formulated. b. Content Development: developing learning content that will be presented in interactive media, such as materials, animations, simulations, videos, exercises, and quizzes, massifying learning content that is accurate, up-to-date, and aligned with learning objectives, and ensuring the use of appropriate language, terminology, and explanations that are easy for students to understand, c) Interface and Interactivity Development, in the form of designing an attractive learning media interface (user interface), Intuitive, and easy to use, integrating interactive features, such as navigation, animations, simulations, quizzes, and feedback and ensuring interactivity so that the media can support the engagement and understanding of student participants, d) Integration with the teachmint application, in the form of integrating interactive learning media that has been developed into the Teachmint application for speaking proficiency needs, and ensuring the media platform teachmint can run well and is easily accessible.

To ensure the four development steps, the researcher validated by involving three validators, material experts, linguists, and media experts. Validation was carried out using a questionnaire instrument. The content of the validation questionnaire can include three aspects and is assessed using a Likert scale of 1 to 4. The results of the assessment from the validators are then calculated and analyzed using the formula Content Validity.

The results of the calculation of the validity of this content will show the level of validity of the product developed based on the assessment of experts. The higher the percentage of content validity, the more valid the product is. (Pamungkas & Fitriyani, 2023) The indicators of the validity of material, language, and media are presented in the following table:

Table 1. Indicators Of The Validity Of The Material, Language, And Media

No	Validation	Likert scale			
A	**Material Expert:**	**1**	**2**	**3**	**4**
1	Suitability of the material to the learning objectives				
2	Accuracy and depth of material				
3	Completeness of material coverage				
4	Freshness and relevance of the material				
5	Clarity of presentation of material				
6	The interconnection between the components of matter				
7	Suitability of examples, exercises, and tests				
B	**Linguist Expert:**				
1	Clarity and readability of Arabic writing				
2	Language Suitability with Students				
3	Arabic grammatical correctness				
4	Consistency in the use of terms and terminology				
5	Ease of understanding sentences and paragraphs				
6	Accuracy of test preparation and practice questions				
7	Language Compatibility with Maharah al-Kalam material				

DOI: 10.18860 /ijazarabi. V7i3.28564
ISSN(print): 2620-5912 | ISSN(online):2620-5947
ejournal.uin-malang.ac.id/index.php/ijazarabi/index

C	**Media Members**	
1	Visual design quality (layout, colors, typography)	
2	Suitability of illustrations, images, and animations	
3	Ease of navigation and interactivity	
4	Audio quality (if any)	
5	Consistency and harmony of the interface	
6	Ease of use and media appeal	
7	Suitability of media to student characteristics	
	Total	
	Percent	

Step Four: Implementation; the validated and revised product is implemented in real field trials. At this stage, the implementation of the media that has been designed and developed is tested on a population of 41 students. Researchers took the entire population as a sample. The sample type uses *Non-Probability Sampling* with *the Purposive Sampling technique*, meaning that the sample is selected based on the researcher's consideration of certain criteria on a limited basis, without the need to conduct a wider trial. The 41 students came from semesters II, IV, and VI of Ma'had Al-Husain Ibnu Ali University of Muhammadiyah Gorontalo, Telaga Biru District, Gorontalo Regency, Academic Year 2023/2024.

After implementation, the researcher distributed a questionnaire to get responses from lecturers and students about whether the results of media design and development were interesting or not so that it was feasible to be applied to improve the mastery of speaking skills. The results of the responses filled in by lecturers, students, and three validators were then processed and analyzed using the following percentage formula:

P = F/N x 100 %

Information: F = Total Turnover

N = Maximum Amount

P = Percentage.

The results of the questionnaire are then interpreted with the following categories:

81% - 100 % = Very interesting (media) Very decent (material) Very good (language)

61% - 80 % = Interesting (media) decent (material) Good (language)

41% - 60 % = Interesting Enough (media) Decent enough (material) Good enough (language)

21% - 40 % = Less Interesting (media) Less Worthy (material) Less Good (language)

0 % - 20 % = Not Interesting (media) Not Worthy (material) Not Good (language)

Fifth step: Evaluation; at this stage, the evaluation is carried out by conducting an effectiveness test of teachmint-based learning media, whether it can improve students' speaking skills. The effectiveness test was carried out with a pretest and a post-test. (Saparwadi, 2021) The pretest was conducted to measure the speaking proficiency of students in both groups (experimental and control) before being given treatment. The researcher provided a treatment in the form of learning using Teachmint media to the experimental group, while the control group conducted learning without using Teachmint media. After that, the researcher conducted a posttest to measure the speaking proficiency of students in both groups, as presented in the following table:

Table 2. Pretest, Treatment, and Posttest

Group	Pretest	Treatment	Posttest
Eksperimen	T1	X	T2
Control	T1	-	T2

Information:
KE: Experimental group KK: Control group
T1: Initial test before product delivery T2: Final test after product delivery
X: Provision of treatment using the product

Furthermore, the data from the results of the pretest and posttest were carried out statistical tests using non-parametric statistics with different tests, namely the Wilcoxon test because the sample was more than 30, and the population of the sample was related. Data collection techniques are carried out by, observation, interviews, questionnaires, and tests. Each data collection technique is accompanied by an instrument. (Ardiansyah et al., 2023) The test is in the form of multiple-choice questions, choosing right or wrong, and connecting and perfecting sentences and essays, the tests that are shared have been validated and the reliability of the test has been carried out, using the latest application.

Data analysis techniques are carried out by qualitative and quantitative analysis. (Susanto et al., 2023) Qualitative data consists of data from literature studies, data from interviews, and data on input suggestions from experts, practitioners, and users. (Sa'adah et al., 2022) Meanwhile, quantitative data consists of data from expert test scoring results and data on product effectiveness test results experimentally from pretest and posttest. (Rawa, 2020)

RESULTS AND DISCUSSION

Results of Needs Analysis

At this early stage, the researcher interviewed one of the Arabic lecturers at Ma'had Al-Husain Ibn Ali to find out the potential and existing problems. From the results of the interviews that have been conducted, the researcher obtained data on student needs, problems, curriculum, and characteristics, as follows:

1. Needs Analysis:
    a. Arabic speaking proficiency is one of the important competencies that must be improved in students of the Arabic Language Education study program.
    b. Learning Arabic requires a medium that can facilitate interactive speaking practice and practice.
    c. Students need technology-based learning media that can be accessed anytime and anywhere to improve their speaking skills.
    d. Lecturers need learning media that can help manage classes and provide feedback effectively.
    e. Arabic lecturers can operate online-based learning media.
2. Problem Analysis:
    a. Arabic learning in the classroom still focuses on theoretical aspects and does not provide enough opportunities for speaking practice.
    b. Students have difficulty practicing speaking Arabic outside of the classroom due to limited resources and interactive learning media.
    c. Students still have difficulty practicing Arabic in daily conversation.
    d. Lecturers have difficulty providing individualized feedback and assessing students' speaking proficiency effectively in large classes.
    e. There has been no media development to improve Arabic speaking proficiency.
3. Analysis of Student Characteristics:
    a. Students of the Arabic Language Education study program are the digital generation who are familiar with the use of technology in learning.

b. Students have high motivation to improve their Arabic speaking skills as a provision to become Arabic teachers in the future.
c. Students need flexibility in practicing speaking Arabic anytime and anywhere through online-based learning media.

4. Curriculum Analysis:
   a. The curriculum of the Arabic Language Education study program at Ma'had Husain bin Ali UMG establishes speaking proficiency as one of the core competencies that students must master.
   b. In the RPS Arabic course, several topics and materials require the development of students' speaking skills.
   c. The development of online-based interactive learning media can support learning outcomes and curricular goals in Arabic courses.

The Speaking Proficiency Semester Learning Plan is described in the following table:

Table 3. Speaking Proficiency Course Semester Learning Plan

A	Course Description
	This course is presented for enrichment and deepening in mastery of the four skills of Arabic by instilling habits in students to get used to speaking, and understand conversations so that they can express what they hear in Arabic either through lecturers, native speakers, electronic media, or their peers and can practice it in conversation.
	In this course, students are trained in the correct Arabic speaking skills, through the development of Arabic vocabulary in simple sentences and everyday expressions.
	B. Learning Outcomes
	1. Attitude
	Have a positive attitude towards Arabic as part of the language of Islam and Arabic culture
	Realize the importance of improving Arabic language competence both in terms of skills and linguistics
	2. Knowledge
	Knowing the context of Arabic expressions;
	Understand the topic quickly and appropriately according to the flow of the conversation;
	Analyze the content of the conversation
	3. Skills
	Able to speak well and correctly according to the theme;
	Able to develop vocabulary in perfect sentences
	Able to conclude the material heard or listened to either directly or through the media

Based on the above curriculum analysis, shows that speaking skills must be developed by being able to speak according to the theme, being able to develop vocabulary in conversation with sentences, and being able to interact with the material heard directly or through the media. The researcher assumes that to improve speaking proficiency, it is necessary to develop interactive media by learning outcomes.

Design Results

In the process of making interactive learning media designs, researchers apply the design by developing learning media(Sari et al., 2023). The design began with the creation of *ta'bir* material using the microsoft Powerpoint application, making revisions according to the notes and corrections of design expert collaborators, and inputting interactive media on the storyboard of the Teachmint application. The media design contains 4 *marhalah* starting from the initial menu display to evaluation. The following is a product design drawing of *ta'bir* material for speaking proficiency.

DOI: 10.18860 /ijazarabi. V7i3.28564
ISSN(print): 2620-5912 | ISSN(online):2620-5947
ejournal.uin-malang.ac.id/index.php/ijazarabi/index

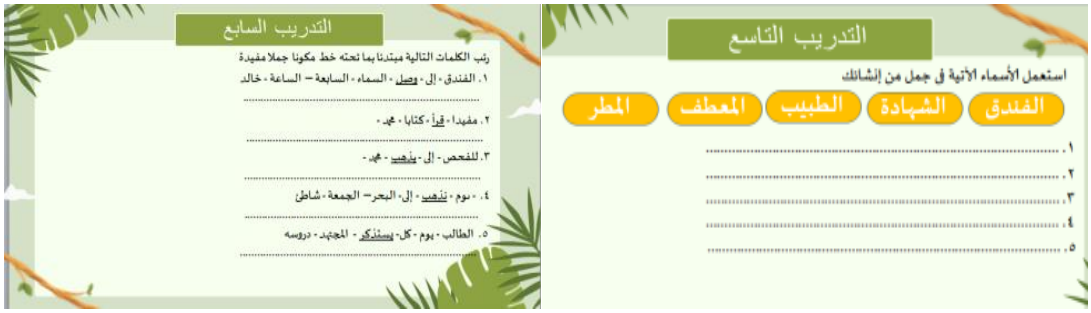
Picture 1. Display of the title and menu of Maharah Kalam Media and Materials

Picture 2. Design Of Picture And Word Learning Materials

Picture 3. Design Of The "Practice Using Vocabulary In Conversation" Menu Display

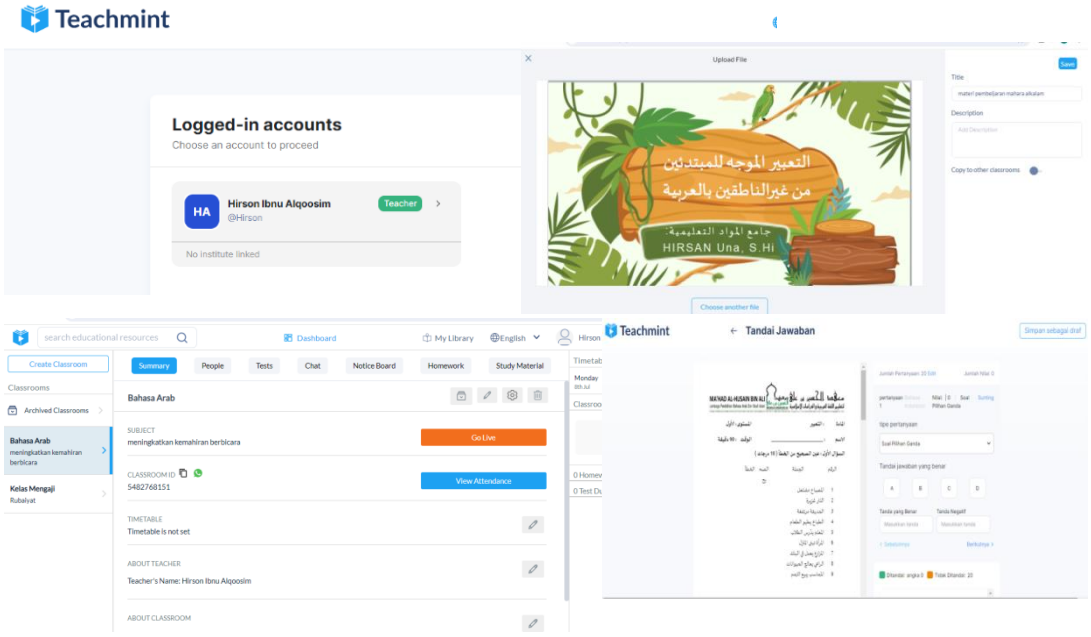
Picture 4. Design Of Picture And Sentence Learning Materials

Picture 5. Interactive Learning Material Design And Final Evaluation Chapter 1



Picture 7. Product Design On The Content Of The Material And Evaluation Chapter 2

Picture 8. Product Design On Content And End-Of-Chapter Evaluation 3



Picture 9. Display Of The Evaluation Menu On The Teachmint Application

Product Development Results

Validation is carried out through three aspects of assessment, (Wahyu Septiningrum & Fauziah, 2021b) Namely: 1). Validation from linguists, to assess the quality of language use and the feasibility of language in the media. 2) Validation from material experts, to assess the suitability and accuracy of the content/material presented in the media. 3) Validation from media experts, to assess the quality of the design, appearance, and technical aspects of the developed media.This will ensure that the resulting learning

media is ready to be used at the next stage (Wahyu Septiningrum & Fauziah, 2021). The following are the results of product validity by media, material, and language experts.

Table 4. Media Validator Assessment Results

No.	Indicator	Likert Score	Criterion
1.	Visual design quality (layout, colors, typography)	4	Very interesting
2.	Suitability of illustrations, images, and animations	4	Very interesting
3.	Ease of navigation and interactivity	4	Very interesting
4.	Audio Quality (if applicable)	3	interesting
5.	Interface consistency and *layout*	3	interesting
6.	Ease of use and media appeal	3	interesting
7.	Suitability of media to student characteristics	3	interesting
	Sum	24	
	Percentage	85,71%	
	Criterion	Very interesting	

Table 4 shows that the results of the assessment or evaluation of the learning media are considered very attractive visually, with illustrations, navigation, audio, consistency, ease of use, and suitability with student characteristics, with a percentage of 85.71% "very interesting".

Table 5. Results of Material Validator Assessment

No	Indicator	Likert Skor	Criteria
1.	Suitability of the material to the learning objectives	4	Highly Worthy
2.	Accuracy and depth of material	4	Highly Worthy
3.	Completeness of material coverage	4	Highly Worthy
4.	Freshness and relevance of the material	3	Worth
5.	Clarity of presentation of material	3	Worth
6.	The interconnection between the components of matter	4	Highly Worthy
7.	Suitability of examples, exercises, and tests	3	Worth
	Sum	25	
	Percentage	89,29%	
	Criterion	Highly Worthy	

Table 5 shows that *mufradat* learning materials are considered very fit for purpose, accurate, in-depth, complete, up-to-date, clear, related to inter-components, and have appropriate examples, exercises, and tests. Overall, the learning material obtained a percentage of 89.29% "highly worthy"

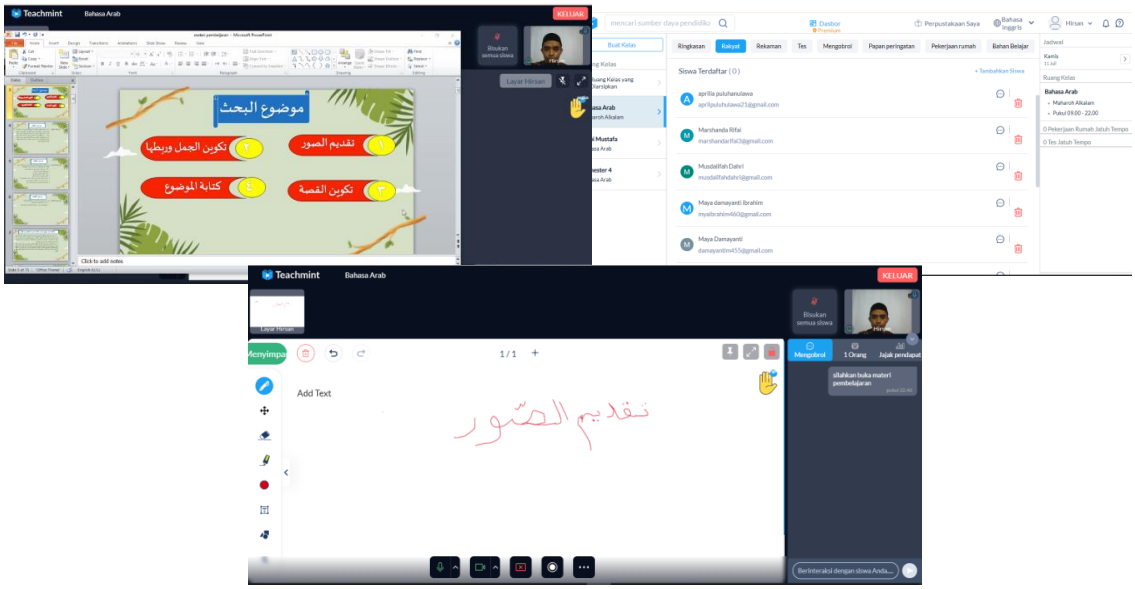
Table 6. Language Validator Assessment Results

No	Indicator	Likert Score	Criterion
1	Clarity and readability of Arabic writing	4	Excellent
2	Language suitability for student-level	4	Excellent
3	Arabic grammatical correctness	4	Excellent
4	Consistency in the use of terms and terminology	3	Good
5	Ease of understanding sentences and paragraphs	4	Excellent
6	Accuracy of test preparation and practice questions	3	Good
7	Compatibility of Language with *Maharah Al-kalam material*	4	Excellent
	Sum	26	
	Percentage	92,86%	
	Criterion	Excellent	

Table 6 shows that the use of language in Arabic learning media is considered very good in terms of clarity, readability, suitability to student levels, grammatical accuracy, consistency of terminology, ease of understanding, preparation of tests and exercises, and compatibility with maharah al-kalam material with a percentage of 92.86% "excellent"

Product Implementation Results

The implementation using teachmint show that Arabic teachers can create virtual classes and provide interactive learning materials for students(Sabri et al., 2019). In the implementation world, teachers can take advantage of teachmint's features to support the online Arabic teaching and learning process. Some of the features that can be used include: 1) Digital whiteboard: Teachers can write, draw, and explain subject matter directly through a digital whiteboard. This makes it easier for the teacher to show examples of sentences, letters, or Arabic grammar. 2) *Screen sharing*: Teachers can share the display of their computer/device screens so that students can see the teaching materials, presentation slides, or Arabic learning videos displayed. 3) Q&A feature: Students can ask questions directly through the chat feature, and teachers can respond and provide feedback in real time. 4) Class recording: Teachers can record Arabic learning sessions, so students can repeat the material anytime and anywhere. Student engagement: teachmint provides a variety of interactive activities, such as assignment collection, quizzes, and exercises, which can help increase student participation and understanding of Arabic language materials.



Picture 10. Implementation Of The Teachmint Application in UMG Online Classes

Thus, using these teachmint features, Arabic teachers can create an engaging, interactive, and effective learning experience for students, even in an online learning format. This can help comprehensively improve students' mastery of Arabic.

Table 7. Lecturer and Student Response Results

No	Assessment Indicators	Lecturer (1)	Student (41)	Total	Percentage
1	Attractive design as an interactive learning medium	4	135	139	82,74 %

2	Easy to use as an interactive learning medium for students	4	133	137	81,55 %
3	Clear subject matter and systematically structured	4	146	150	89,29 %
4	Complete features in sequence to evaluation	3	128	131	77,98 %
5	The Teacmint application is developed practically and according to the curriculum and indicators	3	139	142	84,52 %
6	Eligible for increased mastery of speaking proficiency	4	143	147	87,50 %
Sum		**22**	**824**	**846**	**503,58**
Average		**3,67**	**137,33**	**141**	**83,93%**
Criterion		**Very Worthy and Interesting**			

Table 7 above show that based on the above criteria, it can be concluded that the Teacmint application is considered Very Feasible and Interesting as an interactive learning medium to improve students' mastery of speaking proficiency. This can be seen from the average percentage of assessments which reached 83.93%, in the category "Very Good/Very Worthy and Interesting".

The assessment indicator that received the highest score was "Clear subject matter and systematically structured" with a percentage of 89.29%. Meanwhile, the indicator with the lowest score is "Complete presents features sequentially to evaluation" with a percentage of 77.98%. Overall, the data shows that the Teacmint application is considered very feasible and interesting as an interactive learning medium to improve students' mastery of speaking proficiency.

Evaluation Results

In this last stage, the researcher evaluates the *pretest, treatment, and posttest*. The goal was to determine the effectiveness of the use of teachment-based media to improve students' speaking proficiency in both the experimental and control groups. The pretest questions are objective, the questions have been validated and reliability tests are carried out using the latest. The results of validation and reliability tests are presented in the following table:

Table 8. Results of the Validity and Reliability Test of Questions Using *Anatest*

Question Items	Correlation	Question Items	Correlation
1	significant	21	very significant
2	very significant	22	very significant
3	very significant	23	very significant
4	very significant	24	very significant
5	very significant	25	very significant
6	very significant	26	very significant
7	very significant	27	significant
8	very significant	28	-
9	very significant	29	very significant
10	-	30	significant
11	-	31	significant

12	very significant	32	significant
13	significant	33	significant
14	significant	34	significant
15	significant	35	significant
16	significant	36	significant
17	significant	37	significant
18	-	38	-
19	-	39	-
20	Very significant	40	-
	Reliability 0.79		**Reliability 0.79**

Table 8 above shows that the correlation and reliability values for a set of test items. The table consists of 40 questions. The "Correlation" column shows the correlation between the test item and a specific criterion. While the "Reliability" column shows the reliability coefficient for each set of test items. Correlation values are dominated by the "significant" and "very significant" categories. However, question items 10,11,18,19,28 38,39, and 40 show insignificant, so it is necessary to revise and improve or improve insignificant question items, however the reliability coefficient for 40 question items is 0.79, indicating a high level of internal consistency, so overall, this table provides insight into the relationship between test items and their reliability in measuring question construction to be applied to 42 Ma'had Husain bin Ali UMG students in Pretest and Posttest stages.

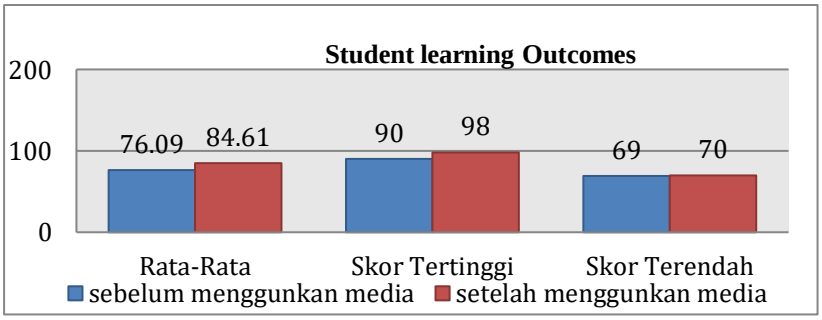


Figure 11. Average Learning Outcomes Before and After Using Media

Table 9 and Figure 13 above show that there is a significant increase between *pre-test* and *post-test* results at the highest score of 90-98, the lowest score of 69-70, and the average of 76.09 compared to 84.61 with an increase of 8.52%. This shows a significant increase between before and after using teachmint media that has been designed, developed, and implemented in online learning. Next, the researcher conducted a statistical calculation analysis to find out the difference between the two.

Table 9. Hasil Paired Samples Test

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	pre test - post tes	-8.524-	5.195	.802	-10.143-	-6.905-	-10.634-	41	.000

Table 10 above shows that to determine the significance statistically, we can look at the "Sig. (2-tailed)" column which shows the p-value. In this table, the p-value is 0.000,

which means it is smaller than the commonly used significance level of 0.05 or 5%. Statistically, if the p-value is less than 0.05, then it can be concluded that the difference between the two paired samples (in this case the pre-test and the post-test) is statistically significant. The formula used to calculate the statistical significance in the paired sample test is as follows:

t = (Mean Difference)/(Standard Error Mean Difference)
Mean Difference = Average difference between pre-test and post-test = -8.524
Standard Error Mean Difference = 0.802
Value = 10.634.

Based on Table 10 above, it shows that a statistically significant t-value will have a p-value smaller than 0.05. So, based on a p-value smaller than 0.05 and a significant t-value, we can conclude that the difference between the pre-test and post-test is statistically significant. Therefore, the results of the hypothesis test showed that the use of online-based interactive learning media using the teachmint application is significantly effective in improving Arabic speaking proficiency in students. This finding is to the purpose of the research, which is to produce an effective online-based interactive learning media to improve Arabic speaking proficiency, as presented in the following hypothesis test summary.

The null hypothesis in this test states that the median difference between the Pre-Test and Post-Test scores is equal to 0. The test used to analyze the data was the Associated Sample Wilcoxon Sign Rating Test. The significance level, denoted as "Sig.", is reported as 0.000, which is less than the typical significance level of 0.05. Since the significance level was lower than 0.05, the decision was made to reject the null hypothesis. The term "asymptotic significance" mentioned at the end indicates that the degree of significance is based on the theory of asymptotics, which is a mathematical concept used in statistics. Overall, the results showed that there was a significant difference between the Pre-Test and Post-Test scores, leading to the rejection of the null hypothesis.

Using the Wilcoxon Signed Rank Test, researchers were able to statistically compare statistically significant differences between the median value of speaking proficiency before and after the use of interactive learning media with the teachmint application. The results of this study provide important implications as an effort to improve the quality of Arabic language learning, especially in improving Arabic speaking proficiency, by utilizing interactive learning media such as teachmint.

CONCLUSION

This study concludes several things: (1) the needs analysis shows that; (a) Students and lecturers need technology-based interactive learning media that can be accessed anytime and anywhere to improve speaking proficiency. (b) Lecturers have not developed special media to improve Arabic speaking proficiency in Ma'had al-Husain bin Ali, (c) The UMG curriculum requires that speaking topics and materials be developed to be more interesting and interactive. (2) Media design using the teachmint application produces *ta'bir* material with four *marhalah*/levels. The complete material starts from the initial menu display to the evaluation. (3) The media developed has been validated by experts, each media expert 85.71% "very interesting", material experts 89.29% "very decent" and linguists 92.86% "very good". (4) The results of the implementation through product trials show that the teachmint application is considered very feasible and

interesting as an interactive learning medium to improve students' mastery of speaking proficiency. The feasibility of this media is by the results of the responses of lecturers and students who obtained a score of 503.58 or 83.93%, with the category "Very interesting and worthy of implementation". (5) The results of the evaluation show that (a) Teachmint application-based learning media is effective in improving students' speaking proficiency. This is evidenced by the increase in the average score from the pre-test of 76.09 to 84.6 in the post-test. (b) The statistical test of paired samples t-test showed a significance value (sig. 2-tailed) of 0.000 which was smaller than 0.05. This means that there is a significant difference between students' learning understanding before and after using interactive learning media based on the teachmint application. (c) The results of the hypothesis test showed that there was a significant difference between the pre-test and post-test scores, so the null hypothesis was rejected because the significance level was lower than 0.05.

This research makes a significant contribution to the development of Arabic language learning, especially in improving students' speaking proficiency. The teacmint application is considered very feasible and interesting as an online interactive learning medium. This research provides an alternative for Arabic lecturers to improve students' speaking proficiency. The results of the research are also an input for Ma'had Al-Husain Ibnu Ali of the University of Muhammadiyah Gorontalo in developing innovative Arabic language learning media. Broadly, this research is beneficial for the development of Arabic language learning in higher education and can be an inspiration for future research.

REFERENCES

Abdul Razak Mursyid, I. R. N. H. (2024). *New Model of Arabic Language Evaluation and Test System in the Development of 21st-Century Learning Media*. *3*(1), 459–474. https://doi.org/https://doi.org/10.58194/eloquence.v3i1.1513

Al-faruq, Z. (2023). Peran Penggunaan Desain Evaluasi Untuk Meningkatkan Kualitas Pembelajaran. *Ilma Jurnal Pendidikan Islam*, *1*(2), 158–171. https://doi.org/10.58569/ilma.v1i2.587

Ardiansyah, Risnita, & Jailani, M. S. (2023). Teknik Pengumpulan Data Dan Instrumen Penelitian Ilmiah Pendidikan Pada Pendekatan Kualitatif dan Kuantitatif. *Jurnal IHSAN : Jurnal Pendidikan Islam*, *1*(2), 1–9. https://doi.org/10.61104/ihsan.v1i2.57

Danial, M. (2022). Peningkatan Hasil Belajar Siswa Dalam Mengunkapkan Expression Of Sympathy Melalui Model Pmpdr Dan Aplikasi Teachmint. *Jurnal P4I*, *2*(0), 1–23. https://doi.org/https://doi.org/10.51878/action.v2i3.1441.

Fauzi, M. I. (2020). Pemanfaan Neurosains dalam Desain Pengembangan Kurikulum Bahasa Arab. *Arabiyatuna : Jurnal Bahasa Arab*, *4*(1), 1. https://doi.org/10.29240/jba.v4i1.1095

Hamidi, K., & Jamaluddin, W. (2023). *Pengembangan Media Pembelajaran Bahasa Arab Berbasis Video Animasi Interaktif untuk Siswa Madrasah Aliyah*. *05*(02), 5289–5296. https://doi.org/https://doi.org/10.31004/joe.v5i2.1098

Harianto, E. (2020). Metode Bertukar Gagasan dalam Pembelajaran Keterampilan Berbicara. *Didaktika: Jurnal Kependidikan*, *9*(4), 411–422. https://doi.org/10.58230/27454312.56

Hidayat, F., & Nizar, M. (2021). Model Addie (Analysis, Design, Development, Implementation and Evaluation) Dalam Pembelajaran Pendidikan Agama

Islam. *Jurnal Inovasi Pendidikan Agama Islam (JIPAI)*, *1*(1), 28–38. https://doi.org/10.15575/jipai.v1i1.11042

Kartini, K. S., & Putra, I. N. T. A. (2020). Respon Siswa Terhadap Pengembangan Media Pembelajaran Interaktif Berbasis Android. *Jurnal Pendidikan Kimia Indonesia*, *4*(1), 12. https://doi.org/10.23887/jpk.v4i1.24981

Kependidikan, J. I., Safira, A. D., Sarifah, I., Sekaringtyas, T., & Jakarta, U. N. (2021). *Pengembangan Media Pembelajaran Interaktif Berbasis Web Articulate Storyline Pada Pembelajaran Ipa Di Kelas V*. *2*(2), 237–253. https://doi.org/https://doi.org/10.37478/jpm.v2i2.1109

Kusumodestoni, R. H., & Wahono, B. B. (2022). Penerapan Metode Waterfall Pada Aplikasi Multimedia Interaktif Pengenalan Huruf Hijaiyah Berbasis Android Pada Paud Nabata. *Infomatek*, *24*(1), 1–8. https://doi.org/10.23969/infomatek.v24i1.4402

Laubaha, S. A., Otaya, L. G., Yasin, Z., Hula, I. R. N., Hairuddin, & Adam, M. Z. (2024). Pengembangan Bahan Ajar Mahāratul Kalām Berbasis Kearifan Lokal Provinsi Gorontalo. *Al Mi'yar: Jurnal Ilmiah Pembelajaran Bahasa Arab Dan Kebahasaaraban*, *7*(1), 459–480. https://doi.org/http://dx.doi.org/10.35931/am.v7i1.3340

Mailani, O., Nuraeni, I., Syakila, S. A., & Lazuardi, J. (2022). Bahasa Sebagai Alat Komunikasi Dalam Kehidupan Manusia. *Kampret Journal*, *1*(1), 1–10. https://doi.org/10.35335/kampret.v1i1.8

Mayasari, A., Pujasari, W., Ulfah, U., & Arifudin, O. (2021). Pengaruh Media Visual Pada Materi Pembelajaran Terhadap Motivasi Belajar Peserta Didik. *Jurnal Tahsinia*, *2*(2), 173–179. https://doi.org/10.57171/jt.v2i2.303

Murtado, D., Hita, I. P. A. D., Chusumastuti, D., Nuridah, S., Ma'mun, A. H., & Yahya, M. D. (2023). Optimalisasi Pemanfaatan Media Pembelajaran Online Sebagai Upaya Meningkatkan Hasil Belajar Siswa di Sekolah Menengah Atas. *Journal on Education*, *6*(1), 35–47. https://doi.org/10.31004/joe.v6i1.2911

N. Hula, I. R., Paputungan, Moh. Z., & Ana Mariana. (2021). Pengembangan Hybrid Learning Berbasis Aplikasi Computer Assited Test (Cat) Pada Program Arabic Proficiency Test. *Tadbir: Jurnal Manajemen Pendidikan Islam*, *9*(1), 103–125. https://doi.org/10.30603/tjmpi.v9i1.2063

Nurhabibah, P., Dewi, K., Guru, P., Dasar, S., & Cirebon, M. (2021). *Pengembangan Website Educandy Sebagai Alat Evaluasi Pada Pembelajaran Bahasa Indonesia*. *17*, 255–264. https://doi.org/https://doi.org/10.25134/fon.v17i2.4652

Nurlaila, N., Piyana, R. O., Kamaluddin, K., Al Husna, L., Hula, I. R. N., & Hasaniyah, N. (2023). *The Effectiveness of Using Lecture Maker-Based Learning Media to Student's Arabic Listening Skills* (Vol. 1, Issue ICoeSSE). Atlantis Press SARL. https://doi.org/10.2991/978-2-38476-142-5_36

Pamungkas, N. E., & Fitriyani, F. (2023). Pengembangan Lembar Kerja Peserta Didik Elektronik (E-LKPD) Berbasis Higher Order Thinking Skill (HOTS) Materi Magnet. *Pedagogia: Jurnal Ilmiah Pendidikan Dasar Indonesia*, *5*(1), 91–102. https://doi.org/10.52217/pedagogia.v5i1.1205

Purnama, S. (2016). Metode Penelitian Dan Pengembangan (Pengenalan Untuk Mengembangkan Produk Pembelajaran Bahasa Arab). *LITERASI (Jurnal Ilmu Pendidikan)*, *4*(1), 19. https://doi.org/10.21927/literasi.2013.4(1).19-32

Puspita, I., Indarti, N., & Nurhayati, D. (2023). Pendekatan, Metode, Strategi Dan Model Pembejaran: Literature Review. *Jurnal Euilibrium Nusantara*, *2*(1), 93–96. https://doi.org/10.56854/jeqn.v2i1.150

Putri, A. Q., Albab, A. U., Linardho, B. F., & Yusuf, A. (2023). Implementasi Teori Belajar Perspektif Psikologi Konstruktivisme Pada Jenjang Pendidikan Dasar. *PREMIERE : Journal of Islamic Elementary Education*, *5*(2), 15–27. https://doi.org/10.51675/jp.v15i2.530

Rawa, N. R. (2020). Pengembangan Lembar Kegiatan Siswa (LKS) Matematika Berbasis Pendekatan Scientific pada Materi Aritmatika Sosial bagi Siswa SMP. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, *6*(2), 319. https://doi.org/10.33394/jk.v6i2.2620

Sa'adah, M., Rahmayati, G. T., & Prasetiyo, Y. C. (2022). Strategi Dalam Menjaga Keabsahan Data Pada Penelitian Kualitatif. *Jurnal Al 'Adad: Jurnal Tadris Matematika*, *1*(2), 61–62. https://doi.org/https://doi.org/10.24260/add.v1i2.1113

Sabri, M., Firdaus, M., & Shahrizal, M. (2019). Instructional feedback analysis of an online virtual language learning platform through EZ-Arabic among Malaysian teachers of primary schools. *International Journal of Asian Social Science*, *9*(2), 204–212.

Salman, S. A., & Septiawati, A. (2023). Suitability of Maharah Kalam Learning Achievement in JSIT Arabic Learning Curriculum With CEFR. *Al-Hikmah: Jurnal Agama Dan Ilmu Pengetahuan*, *19*(2), 231–255. https://doi.org/10.25299/al-hikmah:jaip.2022.vol19(2).9543

Saparwadi, L. (2021). *Perbedaan Hasil Belajar Mahasiswa Bekerja Dengan Tidak Bekerja Pada Analisis Data Kualitatif Dan Kuantitatif*. *2*(2), 20–24. https://doi.org/https://doi.org/10.33365/ji-mr.v2i2.1405

Sari, S. Y., Hidayati, H., & Rahim, F. R. (2023). INTERACTIVE PHYSIC LEARNING MEDIA DESIGN USING LECTORA INSPIRE. *PILLAR OF PHYSICS EDUCATION*, *16*(1), 22–31.

Septya Novena PutriAnak Agung Gede Agung, I. K. S. (2023). Pengembangan Gambar Ilustratif Naturalis Berbasis Literasi Sains untuk Meningkatkan Kemampuan Berpikir Analitis Nafidhotur. *Pengaruh Model Sains Teknologi Masyarakat Dan Pendekatan ESD Dalam Meningkatkan Kepedulian Lingkungan*, *6*(1). https://doi.org/https://doi.org/10.23887/jlls.v6i1.57482

Sulistiani, H., Dwi Putra, A., Rahmanto, Y., & Bagus Fahrizqi, E. (2021). Pendampingan dan Pelatihan Pengembangan Media Pembelajaran Interaktif dan Video Editing di SMKN 7 Bandar Lampung. *Journal of Technology and Social for Community Service (JTSCS)*, *2*(2), 160–166. https://doi.org/https://doi.org/10.33365/jsstcs.v2i2.1375

Susanto, D., Risnita, & Jailani, M. S. (2023). Teknik Pemeriksaan Keabsahan Data Dalam Penelitian Ilmiah. *Jurnal QOSIM : Jurnal Pendidikan, Sosial & Humaniora*, *1*(1), 53–61. https://doi.org/10.61104/jq.v1i1.60

Wahyu Septiningrum, A., & Fauziah, H. N. (2021a). Investigasi Kebiasaan Berpikir Analitis Melalui Pengembangan Instrumen Penilaian Berbasis Isu Sosiosaintifik. *Jurnal Tadris IPA Indonesia*, *1*(3), 269–281. https://doi.org/10.21154/jtii.v1i3.156

Wahyu Septiningrum, A., & Fauziah, H. N. (2021b). Investigasi Kebiasaan Berpikir Analitis Melalui Pengembangan Instrumen Penilaian Berbasis Isu Sosiosaintifik. *Jurnal Tadris IPA Indonesia*, *1*(3), 269–281. https://doi.org/10.21154/jtii.v1i3.156

Wardani, D. A. W. (2023). *Urgensi Multimedia Interaktif Dalam Eksebilitas Pendidikan Di Era Digital*. *4*, 139–153. https://doi.org/https://doi.org/10.54714/jd.v4i2.73

Waruwu, M. (2024). Metode Penelitian dan Pengembangan (R&D): Konsep, Jenis, Tahapan dan Kelebihan. *Jurnal Ilmiah Profesi Pendidikan*, *9*(2), 1220–1230. https://doi.org/10.29303/jipp.v9i2.2141