

Development of *Qawā'id* Learning Media Based on H5P Applications to Increase Student Enthusiasm for Learning at MTsN 1 Pringsewu

Pengembangan Media Pembelajaran *Qawā'id* Berbasis Aplikasi H5P untuk Meningkatkan Antusiasme Belajar Siswa MTsN 1 Pringsewu

Ahmat Sultoni

Pascasarjana Teknologi Pendidikan Universitas Lampung
Email : kangsultoni78@gmail.com

Riswandi

Pascasarjana Teknologi Pendidikan Universitas Lampung
Email : riswandi.1976@fkip.unila.ac.id

Muallimin

Pascasarjana Teknologi Pendidikan Universitas Lampung
Email : saudinsaudin@yahoo.co.id

Fetri Yeni J

Pascasarjana Teknologi Pendidikan Universitas Negeri Padang
Email : fetri53829@yahoo.co.id

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Abstract

Methods and media are two essential elements in the learning process. The phenomenon found in qawā'id learning at MTsN 1 Pringsewu shows that interactive learning media are still rarely used by teachers; even teachers are only fixated on textbooks and use videos and powerpoints that are not interactive. This causes students to not be enthusiastic in participating in learning. This research specifically aims to develop interactive qawā'id learning media to increase learning enthusiasm. This research is development research using the Borg and Gall model with ten steps of development, and only this research is limited to the seventh step only. The results of the media expert's assessment of the H5P application learning media obtained a percentage value of 88% and was in the range of 70%-89%, which means that the media developed was categorized as feasible/good. Meanwhile, based on the results of field trials by giving questionnaires to 32 students of MTs Negeri 1 Pringsewu, student responses to the product developed were obtained with a score of 93.75%. This product in the form of H5P application learning media is very feasible to help students learn qawā'id. However, this research is limited to the jumlah ismiyyah and the jumlah fi'liyyah. Based on the results of observations in learning and questionnaire responses to the developed media, it appears that students are very enthusiastic about participating in learning. This is because the learning media produced is exciting and interactive so that students are excited to learn

Keywords: *Development, Learning Media, H5P Application, Jumlah Ismiyyah and Jumlah Fi'liyyah.*

Abstrak

Metode dan media merupakan dua unsur yang sangat penting dalam proses pembelajaran. Fenomena yang ditemukan dalam pembelajaran *qawā'id* di MTsN 1 Pringsewu menunjukkan bahwa media pembelajaran interaktif masih jarang digunakan oleh guru, bahkan guru hanya terpaku pada buku teks dan penggunaan video dan powerpoint yang tidak interaktif. Keadaan ini menyebabkan siswa tidak antusias dalam mengikuti pembelajaran. Penelitian ini secara khusus bertujuan untuk mengembangkan media pembelajaran *qawā'id* yang interaktif untuk meningkatkan antusiasme belajar. Penelitian ini merupakan penelitian pengembangan dengan menggunakan model Borg and Gall dengan sepuluh langkah pengembangan, hanya saja penelitian ini terbatas sampai pada langkah ketujuh saja. Hasil penilaian ahli media terhadap media pembelajaran aplikasi H5P diperoleh nilai persentase sebesar 88% dan berada pada kisaran 70%-89% yang berarti media yang dikembangkan dikategorikan layak/baik. Sedangkan berdasarkan hasil uji coba lapangan dengan pemberian angket kepada 32 siswa MTs Negeri 1 Pringsewu diperoleh hasil respon siswa terhadap produk yang dikembangkan dengan skor 93,75%. Produk berupa media pembelajaran aplikasi H5P ini sangat layak untuk membantu siswa belajar *qawā'id*. Namun penelitian ini terbatas pada *jumlah ismiyyah* dan *jumlah fi'liyyah*. Berdasarkan hasil observasi dalam pembelajaran dan angket tanggapan terhadap media yang dikembangkan, terlihat bahwa siswa sangat antusias mengikuti pembelajaran. Hal ini dikarenakan media pembelajaran yang dikembangkan menarik dan interaktif sehingga siswa antusias untuk belajar.

Kata Kunci: Pengembangan, Media Pembelajaran, Aplikasi H5P, *Jumlah Ismiah*, *Jumlah Fi'liyyah*.

Introduction

The Arabic language learning curriculum in *madrasah* has been regulated in detail in KMA Number 183 of 2019. According to KMA Number 183 of 2019, the Arabic language curriculum at the *madrasah* level was developed on the basis of the concept of standards-based education and the concept of competency-based curriculum. The curriculum design is intended to provide learning opportunities for students to develop abilities, knowledge, skills, attitudes, and character.¹ About learning Arabic, the curriculum offers four elements of Arabic (*al-aṣwāt*, *al-ḥuruf*, *al-qawā'id*, and *al-mufradāt*) that students must learn.²

¹KMA Nomor 183 Tahun 2019 Tentang Kurikulum PAI Dan Bahasa Arab Di Madrasah," (n.d.), h. 14.

²Ahmad Muradi, "Tujuan Pembelajaran Bahasa Asing (Arab) Di Indonesia," *Jurnal Al Maqoyis* I, no. Vol 1, No 1 (2013) (2013): 128-37, <https://doi.org/http://dx.doi.org/10.18592/jams.v1i1.182>.

Furthermore, each component of the Arabic language is revealed to be its scientific discipline.³

According to KMA Number 183 of 2019, teachers are led to pay attention to three main things during the Arabic learning process. *First*, the learning process is carried out using the target language (Arabic). In this case, the teacher is expected to be a model speaker and a medium for students to get new vocabulary. *Second*, innovate to make materials in the madrasah environment as a source of learning. *Third*, learning Arabic is designed by prioritizing oral skills followed by writing skills. So the order of teaching is to teach listening, followed by speaking, reading, and writing.

The curriculum design is applied to all schools under the Ministry of Religion. One of the school samples that the authors chose in this study was MTs Negeri 1 Pringsewu. MTs Negeri 1 Pringsewu is a junior high school with Islamic characteristics at the junior high level, requiring students to learn Arabic. Learning Arabic at MTs Negeri 1 Pringsewu is a program taught through intense full-day school classes. The expected language competence at MTs Negeri 1 Pringsewu is that students can actively and passively be using Arabic. As stated in the curriculum, MTs Negeri 1 Pringsewu teaches Arabic through four elements of the Arabic language (*al-aṣwāt*, *al-ḥuruf*, *al-qawā'id*, and *al-mufradāt*).

Learning Arabic for class VIII MTs Negeri 1 Pringsewu, especially in the mastery of *qawā'id*, is the lowest compared to other elements of Arabic. Based on pre-research data, the lack of understanding of *qawā'id* is due to students' lack of enthusiasm and activeness in learning Arabic. This is because the learning media used by the teacher is not interactive. Teachers do not innovate to use technology-based learning media. The learning is very monotonous by only relying on textbooks with the lecture method and practice questions. In the end, this causes *qawā'id* learning to take place ineffectively.⁴ More importantly, the material taught becomes easily forgotten and less meaningful.

Seeing this situation, learning Arabic must be designed according to students' times

³Maksudin and Qoim Nurani, *Pengembangan Kurikulum Pembelajaran Bahasa Arab (Teori Dan Praktik)* (Yogyakarta: Pascasarjana FITK UIN Sunan Kalijaga, 2018), h. 98.

⁴Faiq Ilham Rosyadi and Munaya Ulil Ilmi, "E-Learning: An Implementation for Arabic Learning During the Covid-19 Pandemic," *ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, Dan Budaya Arab* 4, no. 1 (2021), <https://doi.org/10.17509/alsuniyat.v4i1.32259>.

and psychology.⁵ Moreover, most of today's *madrasah* students were born after 2000 (generation z). They have different habits from previous generations, especially in interaction with technological developments.⁶ The learning experience of this generation is heavily influenced by technology, and this can be seen in the deep dependence on gadgets.⁷ One perceived impact is the reduced duration of student concentration during the learning process. In this case, teachers must be more creative, innovative, and competent in developing engaging media adapted to technological developments, students' mindsets, and habits in learning.⁸

Learning media innovation must be based on technology to attract generation Z. The use of appropriate technology will facilitate teachers in developing more exciting learning.⁹ One of the technologies that the authors offer in this study is the H5P application. H5P is a free and open-source content collaboration framework based on JavaScript. H5P stands for HTML5 Package and aims to make it easier for everyone to create, share, and reuse interactive HTML5 package content. The content successfully developed by H5P includes quizzes, interactive timelines, interactive presentations, interactive videos, etc.¹⁰

The H5P application is considered effective in facilitating interactive language learning. Ramliyana and Ramdhan's research confirmed that students were delighted and more receptive to this media-assisted learning material. This is partly because the H5P application is relevant to the learning styles of students who are familiar with technological advances.¹¹ The H5P application, which provides opportunities for students to experiment

⁵Tulus Musthofa and Faiq Ilham Rosyadi, "Actualization of Behavioral Theory in Learning Arabic Speaking Skills at the Madrasah Aliyah Level," *Universal Journal of Educational Research* 8, no. 12 (2020): 7343–49, <https://doi.org/10.13189/ujer.2020.082518>.

⁶Agus Purnomo et al., "Karakteristik Penilaian Pembelajaran Pada Kurikulum 2013 Di MI," *Journal of Mathematics Education and Applied* 1, no. 1 (2020): 10–16, <https://doi.org/http://dx.doi.org/10.17977/um022v1i12016p070>.

⁷Yuli Kurniawati Sugiyo, Sony Zulfika, and Widayanti Widayanti, "Evaluasi Program Webinar (Web-Based Seminar) Parenting Education Sebagai Upaya Meningkatkan Literasi Media Digital Dalam Mendidik Generasi Z Di Kota Semarang," *Journal of Studies in Early Childhood Education (J-SECE)* 1, no. 2 (2018): 17, <https://doi.org/10.31331/sece.v1i2.719>.

⁸Nisa Fahmi Huda, "Penggunaan Media Pembelajaran Spinning Wheel Dalam Pembelajaran Qawaid Nahwu," *Lisanan Arabiya: Jurnal Pendidikan Bahasa Arab* 4, no. 2 (December 29, 2020): 155–74, <https://doi.org/10.32699/liar.v4i2.1495>.

⁹Eddy Yusuf, "Pembelajaran Berbasis Teknologi Untuk Generasi Z," *Widyakala Journal* 3 (2016): 44, <https://doi.org/10.36262/widyakala.v3i0.23>.

¹⁰Meisye Anastacya Pinoa, "Pengembangan Dan Penerapan Konten H5P Pada E-Learning Berbasis Lms Menggunakan Moodle," *JATISI (Jurnal Teknik Informatika Dan Sistem Informasi)* 8, no. 2 (2021): 647–63, <https://doi.org/10.35957/jatisi.v8i2.931>.

¹¹Randi Ramliyana and Vickry Ramdhan, "Pemanfaatan H5P Dalam Pembuatan Tes Bahasa," *Seminar Nasional Riset Dan Teknologi Semnas Ristek*, 2020, 323–29.

and explore a topic, is one of the most effective strategies that teachers can develop by utilizing the advantages of information technology.¹² Therefore, this study aims to create interactive media assisted by the H5P application as a *qawā'id* learning media. Furthermore, this study aims to determine the level of validation of the H5P application and its effectiveness in *qawā'id* learning. Due to limited time and knowledge, the researcher limited the *qawā'id* material to the *jumlah ismiyah* and *jumlah fi'liyyah* as material that was conveyed through the H5P application.

Method

This research is a research and development (R&D). R&D is a process or method used to produce a particular product and test its effectiveness. The type of R&D research used in this study is the Borg and Gall design model, consisting of 10 steps.¹³ However, this research is limited to step 7, which can be seen in the following chart:

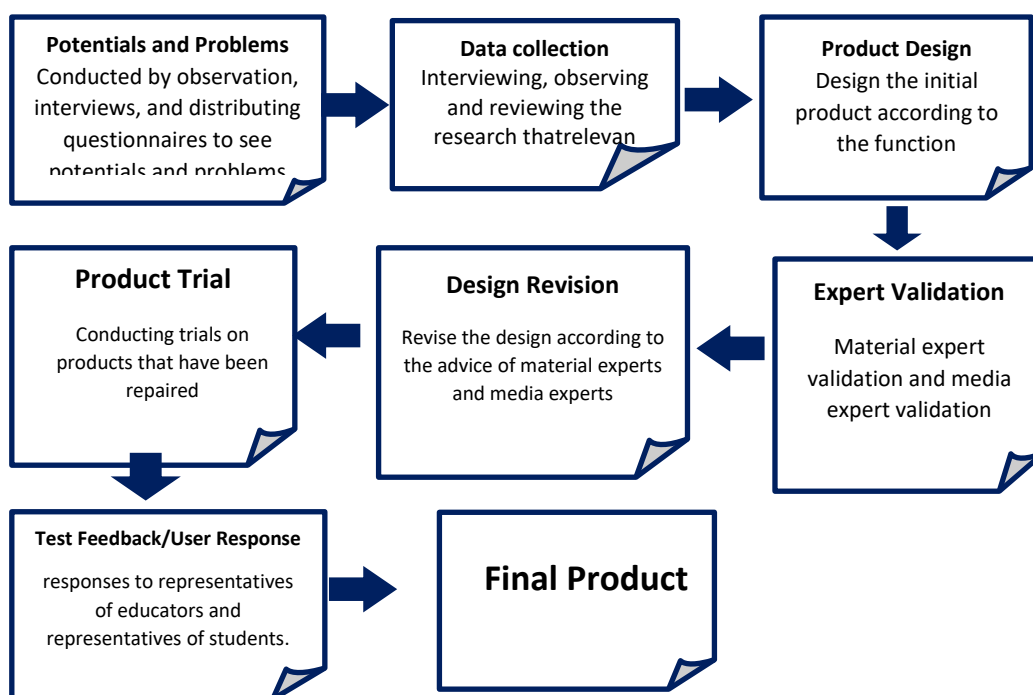


Figure 1. Research and Development Steps

¹²Stephen Frezza et al., "Modelling Competencies for Computing Education beyond 2020: A Research Based Approach to Defining Competencies in the Computing Disciplines," *Annual Conference on Innovation and Technology in Computer Science Education, ITiCSE*, 2018, 148-74, <https://doi.org/10.1145/3293881.3295782>.

¹³Muarifatul Maulidiana and Nasiruddin, "Development of E-Module Media in Learning Arabic for Class X Students of MAN 4 Ngawi," *Al Mahara: Jurnal Pendidikan Bahasa Arab* 6, no. 2 (2020): 279-92, <https://doi.org/10.14421/almahara.2020.062-07>.

This study's data collection techniques use observation techniques, interviews, documentation, and questionnaires. Meanwhile, the data analysis used in this research is qualitative and quantitative. There are two types of data obtained in this study: qualitative and quantitative data. Qualitative data in the form of input, suggestions for improvement obtained from the validator team. At the same time, quantitative data is qualitative data stored in numerical form. The numerical data obtained is then converted into a qualitative product feasibility level with guidelines according to the criteria for the ideal research category and the ideal percentage as follows:

The ideal percentage of each aspect of the learning media

$$\frac{\text{Score each aspect}}{\text{Maximum ideal score}} \times 100 \%$$

Overall Ideal Percentage

$$\frac{\text{Overall score aspect}}{\text{Maximum ideal score}} \times 100 \%$$

Result and Discussion

H5P Application Learning Media

Learning media is one of the essential components in the learning process. Because learning media can help convey messages from sender to recipient to stimulate thoughts, feelings, concerns, and interests to know effectively.¹⁴ On the same side, learning media is a learning tool used as an intermediary in teaching and learning to enhance effectiveness and efficiency in achieving learning objectives. In this sense, the learning media should increase further the effectiveness and efficiency in achieving learning goals.

Asyhar said there are 4 learning media commonly used in the learning process: audio media, visual media, audio visual media, and multimedia. Visual media are media used in the learning process that can be accessed through the five senses of the eye. Examples of visual media are books, picture cards, photos, etc. The audio media is the media used by involving the students' sense of hearing. Examples of audio media are radios, CD players, and tape recorders. At the same time, audio-visual media is a type of media used in learning activities by involving the senses of hearing and the implications of sight simultaneously, for example, TV, film, video. Lastly, multimedia is computer-based media

¹⁴Arif. S Sadiman et al., *Media Pendidikan : Pengertian, Pengembangan, Dan Pemanfaatannya* (Jakarta: PT.Raja Grafindo Persada, 2005).

that uses various types of media in an integrated manner in learning activities.¹⁵

In choosing learning media, at least several criteria must be considered by an educator. First, the selection of learning media must be following the learning objectives. This means that the learning media chosen by a teacher is based on the learning objectives set. Second, it is relevant to the material to be taught. If the learning materials are facts, concepts, principles, and generalizations, the learning media chosen must be following this. Third, according to the teacher's skills in using certain learning media. The teacher's skill in using the media is essential. No matter how good the media is, it will not produce the expected output without the support of the appropriate skills. Fourth, pay attention to the time it takes to use the media. Fifth, it is adjusted to the level of students' thinking to understand the meaning contained in it.¹⁶ From the description above, the researcher concludes that learning media are tools or intermediaries used to convey messages in the learning process so that they can achieve goals effectively and efficiently. The learning media used must consider the factors of learning objectives, teaching materials, teacher skills in operating, availability of time, and suitability of students' thinking levels.¹⁷

As mentioned in the introduction, H5P stands for HTML 5 Package. This application was created to make it easier for everyone to create, share, and reuse interactive HTML5 content. The content in H5P includes interactive videos, quizzes, interactive timelines, interactive presentations, etc. As of June 2018, H5P has been financially supported by the Mozilla Foundation in the MOSS.H5P.org program. MOSS.H5P.org is a community website where libraries, apps, and H5P content types can be shared. H5P apps and content work the same way on all H5P compatible websites. There are currently four integration platforms for Drupal, WordPress, Tiki, and Moodle.

Increasing user interest when accessing H5P content in e-learning is the goal in developing and implementing H5P content. Interactive learning features available in the H5P application consist of interactive videos, PowerPoint, and quizzes.¹⁸ which is very

¹⁵R Asyhar, *Kreatif Mengembangkan Media Pembelajaran* (Jakarta: Referensi Jakarta, 2011), h. 44-45.

¹⁶Munir, *Multimedia Konsep & Aplikasi Dalam Pendidikan* (Bandung: Alfabeta, 2015), h. 110.

¹⁷N Sudjana and Rivai Ahmad, *Media Pengajaran* (Bandung: Sinar Biru, 1991), h. 183.

¹⁸Rendi Syaputra and Arief Budiman, "Pengembangan Sistem Pembelajaran Dalam Jaringan (Studi Kasus : Sman 1 Gedong Tataan)," *Journal Teknologi Dan Sistem Informasi* 2, no. 3 (2021): 89-101, <https://doi.org/https://doi.org/10.33365/jtsi.v2i3.878>.

suitable for generation Z.¹⁹ In simple terms, the steps for creating content in the H5P application are; (1) Click and login to <http://www.h5p.org> (this step can be overridden by installing a plugin on WordPress and supported cms). (2) Click Tryout H5P (3) Select the type of H5P content you want to create. (4) Proceed as directed (5) Ready-made H5P interactive content can be shared, downloaded, and embedded.

Potential and Problems

Learning Arabic has two essential elements, namely methods and teaching media. These two aspects are related to each other. The selection of one particular way will affect the type of appropriate learning media.²⁰ Vice versa, the selection of learning media will affect the proper learning method. Nevertheless, to a certain extent, various other aspects must be considered in choosing media, such as; teaching objectives, learning materials, types of assignments, and learning contexts, including students' characteristics. The primary function of learning media is as a teaching aid that also influences the climate, conditions, and learning environment that a teacher arranges and creates.

Appropriate learning media in the learning process can generate new motivation and interest, stimulate students to continue learning, and even have a psychological effect on students. In addition, good learning media can also help students improve their understanding of the material being studied. As mentioned in the background, interactive learning media are still rare, and teachers are fixated on textbooks, the use of media in the form of non-interactive learning videos, and non-interactive PowerPoint slides. Learning media using the H5P application contains simple navigations that make it easier for users to understand *qawā'id*, especially on the material on the *jumlah ismiyyah* and *jumlah fi'liyyah*. The framework of thought in this research is described as follows.

¹⁹Pinoa, "Pengembangan Dan Penerapan Konten H5P Pada E-Learning Berbasis Lms Menggunakan Moodle."

²⁰Ringga Dwi Anggraini, Ikha Listyarini, and Choirul Huda, "Keefektifan Model Picture And Picture Berbantu Media Flashcard Terhadap Keterampilan Menulis Karangan," *International Journal of Elementary Education* 3, no. 1 (2019): 35, <https://doi.org/10.23887/ijee.v3i1.17282>.

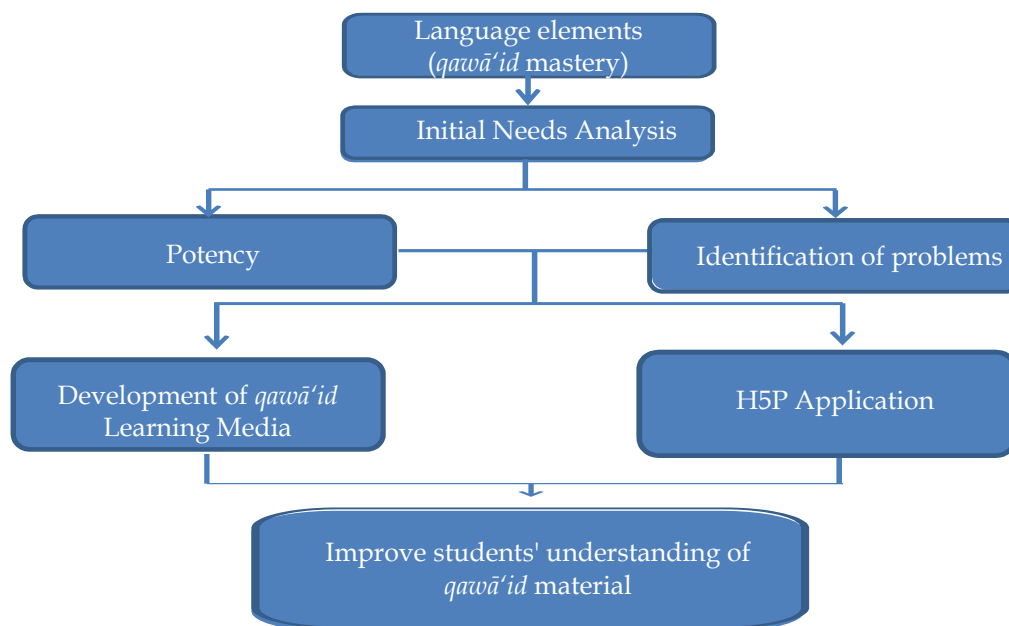


Figure 2. Research thinking framework

Data collection

Data collection in this study was carried out by interviewing and observing the ongoing learning process. Other data obtained are photos of printed textbooks of teaching materials from schools using data collection tools in the documentation. Next, collect literature related to the problems studied to formulate an appropriate design for teaching materials.

Product Design

At this stage, the researcher has made an initial product in the form of an H5P application and made an instrument to measure the product's performance. Included in this step are preparing supporting components, making usage guidelines and manuals, and evaluating the feasibility of these components. The display of H5P application learning media products can be seen in the following figure:



Figure 3. Worksheet

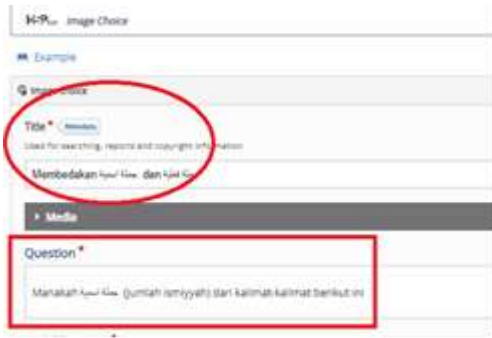


Figure 5. Tittle and questions

Figure 4. Type of test

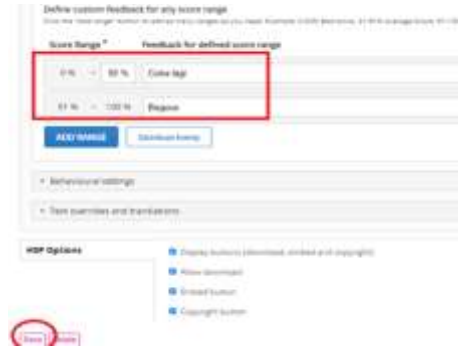


Figure 6. Scoring column, comment and save

Design Validation

This step is carried out to determine the feasibility of the design, the feasibility of the material, its operation. Design validation was carried out using instruments. The assessments obtained are also an input for improving product quality. The data is in the form of qualitative data, which is converted into quantitative form and then tabulated and analyzed in every aspect. The final score obtained is transformed into a qualitative product feasibility level with guidelines according to the criteria for the ideal research category and the ideal percentage.

The ideal percentage of each aspect of the learning media

$$\frac{\text{Score each aspect}}{\text{Maximum ideal score}} \times 100 \%$$

Overall Ideal Percentage

$$\frac{\text{Overall score aspect}}{\text{Maximum ideal score}} \times 100 \%$$

Percentage of Eligibility of material aspect

$$\frac{51}{56} \times 100 \% = 91 \%$$

Percentage of Ideal Aspect Display

$$\frac{22}{24} \times 100 \% = 91,6 \%$$

Percentage of Implementability Aspect Ideal

$$\frac{19}{20} \times 100 \% = 95 \%$$

Percentage of Ideal Language Aspects

$$\frac{18}{20} \times 100 \% = 90 \%$$

Percentage of Ideal Aspect of Convenience

$$\frac{18}{20} \times 100 \% = 90 \%$$

The material expert and media expert validation questionnaire uses a Likert scale with four answer choices. The interval data can be analyzed by calculating the average answer based on the scoring of each answer from the response with the formula for the total score divided by the maximum score multiplied by 100%. The summary of the data that has been obtained from the validator team (full notes are in the appendix) can be seen in the following table:

Table 1. Expert validation data summary

No	Aspect	Indicator	Average Score	Maximal Ideal Score	Ideal Percentage (%)	Quality
1	Material eligibility	1 s.d15	3,4	56	91 %	Very good
2	Display	16 s.d21	3,67	24	91,6 %	Very good
3	Language	22 s.d26	3,6	20	90 %	Very good
4	Execution	27 s.d 31	3,8	20	95 %	Very good

5	Easy use	22 s.d36	3,6	20	90 %	Very good
Total			3,88	140	91,5 %	Very good

Design Revision

This stage is carried out to improve the H5P application product according to the input of material experts and media experts. Revisions are made so that the resulting product follows the expected outcome. Furthermore, notes on improvements and improvement progress as well as the display of the final product results that the researchers did can be seen in the following tables and figures:

Table 2. Product repair notes

Before Revision	After Revision
1. No orders or instructions	1. Written instructions clearly
2. Font size is too small	2. Font size adjustable
3. The color of the text does not vary	3. Varied font colors

Product Trial

Researchers tested their products to class VIIB involving 32 subjects. Data collection and analysis in this step can be done with a research instrument in the form of a questionnaire.

User Response

Thirty-two students of MTsN 1 Pringsewu carried out the scoring of student responses to this textbook. The number and name of the respondent can be seen in the appendix. The

questions posed in the research instrument consisted of several indicators, including Have the instructions for using *qawā'id* learning media on the *jumlah ismiyyah* and *fi'liyyah* materials with H5P been clearly conveyed? Is the language used in this media easy to understand? Does this medium encourage curiosity for you? Is the writing in this learning media easy to read? Are the examples in this learning media clear enough? Does this learning media increase your knowledge?

Furthermore, the student response questionnaire was analyzed using the score formula for students who answered "yes" divided by the total number of students and multiplied by 100%. The answer "yes" was 93.75%, while the students answered "no" were 6.25%. You can see this advantage in the following table:

Table 3. Recapitulation of Student Responses on H5P Application Products

Total Score	240
Maximum ideal score	256
Perscentage	93,75

$$\frac{240}{256} \times 100 \% = 93,75 \%$$

Figure 7. Percentage of Student Responses on H5P Application Products

Based on the observations in learning and interviews with students, they are very enthusiastic about participating in learning. The media developed is interactive, making them more excited about continuous learning.

Final Product

This stage is the final stage of the author's research series. After conducting expert validation, use trials, and student response tests, the researchers finalized the H5P application product.

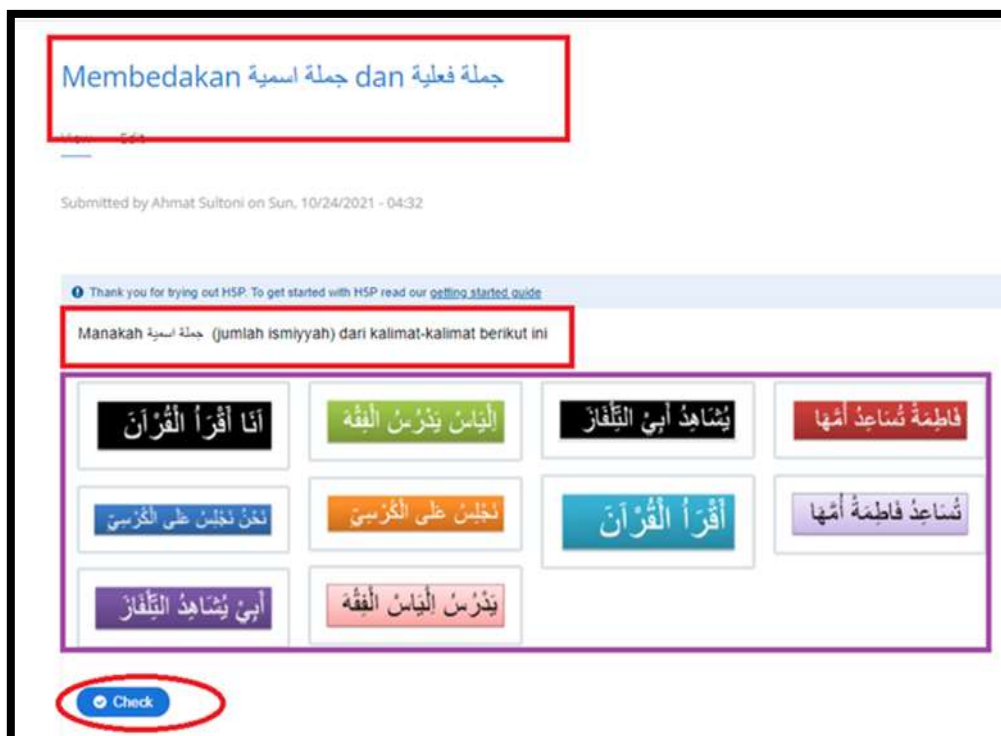


Figure 8. Final Product

Researchers did not do it until the mass production stage because researchers had limited time and funds to carry out the mass production stage.

Conclusion

The *qawā'id* learning media produced in this study is the H5P application. The quality of the H5P application learning media based on the assessment of material experts is included in the excellent category, with a percentage score of 92% from a maximum score of 100%. The results of the media expert's assessment on the H5P application learning media obtained a percentage value of 88%. They was in the range of 70%-89%, which means that the developed media is categorized as feasible/good. Meanwhile, based on the results of field trials by giving questionnaires to 32 students of MTs Negeri 1 Pringsewu, the results obtained were student responses to the developed product with a score of 93.75%. The development of H5P application learning media is very feasible to help students learn *qawā'id*. However, this research is limited to *jumlah ismiyyah* and *fi'liyyah*. Based on the results of observations in learning and questionnaire responses to the developed media, it can be seen that students are very enthusiastic about participating in learning. This is

because the learning media designed are interesting and interactive so that students are excited to learn.

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