

## Reconstruction Of Audio-Visual Learning Media Based On TPACK (Pedagogical Content And Knowledge Technology) On Moral Theology Material

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### ABSTRACT

*This research aims to design an audio-visual learning media based on TPACK (Technological, Pedagogical, Content Knowledge) that can increase students' understanding of learning concepts in Aqidah Akhlak material and can improve the quality of learning for teachers. The method used in this research is Research and Development (R&D) research. The development model used in this research is ADDIE including Analysis, Design, Development, Implementation, and Evaluation. The research and development procedures that will be carried out by researchers only consist of three stages, namely analysis, design, and development. The limitation of this research is only at the development stage due to limited time and energy. This research was conducted on class XI students of MA Nizhamiyah Ploso and MAN 4 Jombang. The research instrument used material validation sheets, media validation and student response questionnaires. Data collection through product validation and student responses to the product. Data were analyzed using product feasibility tests and product response tests by students. The results of the research on TPACK-based audiovisual learning media on moral creed material produced obtained results after going through the revision and validation stages with an average score of 88% in material validation and media validation obtained an average score of 84%, the material expert validator and media expert stated that Learning media is very relevant and worth using. Then, at the test stage, students' responses to the suitability of the learning media obtained an average score of 83% with very interesting criteria.*

**Keywords:** Audio-Visual Learning Media; TPACK; Moral Theology

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### INTRODUCTION

Nowadays, the development of digital technology has a big impact on human life, for example in the field of education. This happens because of the effectiveness, efficiency, and interesting aspects offered by education with digital technology nuances. As information technology advances, teachers must master a technique that will later be used as a medium for deep learning in the process of teaching activities in the classroom. Quality education can be a support. The challenge of integrating technology into learning is increasing. Integrating technology is not just a formality but must be truly meaningful as part of a process that makes it easier for students to learn (Hanik et al., 2022; Rafi & Sabrina, 2019).

To solve these educational challenges, it is necessary to develop the learning process in the classroom. Teaching activities are based on knowledge about the material being taught (content knowledge), how to teach the material (pedagogical knowledge), and knowledge about the use of various technologies (technological knowledge), all of which intersect and support each other. Therefore, good and effective learning must include the material, the way the material is delivered, and the use of technology (Rahmadi, 2019).

One way of good and effective learning is using the TPACK (Technological, Pedagogical, and Content Knowledge) approach. TPACK is a framework for designing modern learning models by combining three main components, namely technology, pedagogy, and knowledge (Fajero et al., 2021; Hofer et al., 2015; Martin, 2015; Meileni et al., 2022; Quintana & Zelaya, 2015; Suyamto et al., 2020).

These three elements are then combined into one unit in a learning plan, process, and assessment in education which will become one unit capable of developing education in the future which will be called the era of digital technology. The TPACK approach is formed from a combination of 3 types of basic knowledge, namely Technological Knowledge (TK), Pedagogical Knowledge (PK), and Content Knowledge (CK). The results of the combination of these 3 basic knowledge, produce 4 new knowledge, including Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK), and Technological Pedagogical Content Knowledge (TPACK) (Absari et al., 2020; Hanik et al., 2022; Rosyid, 2016).

Based on field studies, according to one class XI student at MA Nizhamiyah Ploso, learning Moral Theology is very important for students. According to them, the Moral Theology subject is easier to understand compared to other subjects. Apart from discussing monotheism, there are also good moral values that can be applied to students in everyday life. However, in class XI Moral Theology Learning at MA Nizhamiyah Ploso there are still obstacles in the learning process. During the learning process, teachers only use the lecture method, and many learning media are still limited to printed books, due to the lack of variety of learning used by teachers, and teachers who teach are not capable enough to master technology in the current era. Students are only able to absorb material according to what is in the printed book. Thus, the insight gained by students is only limited to what the teacher has explained and what has been learned in the printed book.

In order to overcome the problems above, it is necessary to have interesting learning media, which is implemented in class XI MA Nizhamiyah Ploso and MAN 4 Jombang in the Moral Theology subject so that students are able to absorb the material optimally. Because, basically media is created as a tool for students in the learning process. One way is by using media created by researchers, namely TPACK-based audio-visual learning media. As the name suggests, researchers hope that this TPACK-based audio-visual learning media can be presented as a medium that can make it easier to improve students' understanding of learning concepts in Moral Theology material and can improve the quality of learning for teachers. TPACK-based audio-visual learning media is media created by researchers by displaying material that has been packaged in an attractive way that can increase students' enthusiasm for learning (Wijaya et al., 2020).

The application of TPACK-based audio-visual media has a good impact on learning. The research results from (Wijaya et al., 2020), et al show that the application of TPACK-based audio-visual media using Hawgent Dynamic Mathematics Software can be seen from the validation results by material experts, getting a percentage of 86.67 in the aspect of conformity with the curriculum. In the learning media material aspect, the percentage was 80.00 percent and in the learning media evaluation aspect, the percentage was 73.33 percent. The total score of material experts on the Hawgent Dynamic Mathematics Software learning media received a percentage of 80.00 percent. In other words, learning media in the material aspect is valid. In the assessment aspect from media experts, the display aspect of learning media received a score of 93.33 percent. In the technical aspects of use and ease of use, Hawgent dynamic mathematics software received a score of 80 percent. In the excellence aspect of learning media, the percentage was 93.33 percent. The total learning media score in the media aspect got a total percentage of 88.89 percent. Based on validation results from media experts and material experts, the development of TPACK-based learning media using Hawgent Dynamic Mathematics Software was declared valid and can be implemented in schools. The results of research from (Rofina & Mellisa, 2022) show that the development of audio-visual learning media based on video documentaries on tissue culture material at SMK N 1 Lubuk Dalam received a very valid category based on the validation results and mating of each expert. The validation results by material experts were 91.67% (very valid), media experts 93.75% (very valid), and learning experts 100% (very valid), so the overall average validation results for documentary video learning media was 95.14 % with very valid category. This documentary video-based audio-visual learning media also received a positive response from students. This can be seen from the results of the questionnaire, the overall student response was 90.58% (very good). Thus, audio-visual video media based on network culture documentary videos is feasible and can be used as an alternative learning media.

Based on this explanation, this research aims to determine the feasibility and response of students to TPACK-based Audio Visual learning media in Aqidah Akhlak class XI material at MA Nizhamiyah Ploso and MAN 4 Jombang.

## METHOD

The method used in this research is a type of research and development R&D (Research and Development). The R&D method is a research method used to create products and test the effectiveness and validity of these products. The development model used in this research is ADDIE including Analysis, Design, Development, Implementation, and Evaluation. The limitation of this research is only at the development stage due to limited time and energy so the implementation and evaluation stages will be carried out in the future.

1. Analysis

This stage aims to analyze needs in the product development process that suit user needs. This stage emphasizes the analysis of the curriculum used at the research locations, namely MA Nizhamiyah Ploso and MAN 4 Jombang. Apart from that, the researcher also adjusted the learning implemented by the teacher and the characteristics of class XI students at MA Nizhamiyah Ploso and MAN 4 Jombang.

2. Design

This stage is a further stage after analyzing the students. Researchers here plan to create a learning media product that will be implemented in accordance with student needs. Planning in making TPACK-based audiovisual learning media has several stages, namely: a) creating a storyline, b) product design process, and c) product finishing.

3. Development

The development of TPACK-based audio-visual learning media is carried out by determining the quality of TPACK-based audio-visual learning media by validating the product with material experts and media experts. Apart from measuring the suitability of the product, researchers also tested the product response on class XI students. This trial is to determine the ease of use of the product.

The research instruments used media validation sheets, material validation sheets, and student response questionnaires to develop products. In addition, data collection carried out product validation and student responses based on assessment scores in Table 1 and Table 2. The data obtained was then processed through product feasibility testing and student response testing according to Table 3 and Table 4.

**Table 1** Assessment Score for Material and Media Validation

No	Criteria	Score
1.	Very relevant	5
2.	Relevant	4
3.	Quite relevant	3
4.	Less relevant	2
5.	Irrelevant	1

**Table 2** Assessment Score for Student Respon (Arikunto, 2010)

No	Criteria	Score
1.	Very agree	4
2.	Agree	3
3.	Don't agree	2
4.	Very don't agree	1

**Table 3** Media Appropriateness Score

No	Percentage (%)	Criteria
1.	81-100	Very worthy
2.	61-80	Worthy
3.	41-60	Quite worthy
4.	21-40	Not worthy
5.	0-20	Not feasible

**Table 4** Student Response Score (Riduwan, 2013)

No	Percentage (%)	Criteria
1.	81-100	Very interesting

2.	61-80	Interesting
3.	41-60	Quite Interesting
4.	21-40	Less Interesting
5.	0-20	Not Attractive

## RESULT AND DISCUSSION

### Result

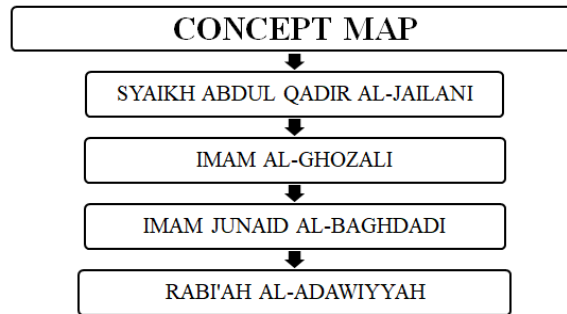
This research was carried out using the ADDIE research and development model where the research limits were only 3 stages carried out at MA Nizhamiyah Ploso and MAN 4 Jombang and the following data was obtained.

#### 1. Analysis

Researchers conducted a curriculum study on the subject of moral beliefs for MA Nizhamiyah Ploso and MAN 4 Jombang class XI which is presented in Table 5 and Figure 1.

**Table 5** Core Competencies, Basic Competencies, and Indicators

Core Competencies	Basic Competencies	Indicators
1. Understand and practice the teachings of the religion he adheres to	1.10. Embrace Islamic spiritual values in the Sufism teachings of the great Sufis.	1.10.1. Explaining Islamic spiritual values in the Sufism teachings of the great Sufis.
2. Appreciate and practice honest, disciplined, responsible, caring behavior (mutual cooperation, cooperation, tolerance, peace), polite, responsive and pro-active and show an attitude as part of the solution to various problems in interacting effectively with the social and natural environment and in placing oneself as a reflection of the nation in world relations	2.10. Practicing an attitude of piety and istiqamah that reflects the values of Sufism in life.	2.10.1 Get used to an attitude of piety and istiqamah that reflects the values of Sufism in life.
3. Understand, apply, analyze factual, conceptual, procedural knowledge based on curiosity about science, technology, arts, culture and humanities with insight into humanity, nationality, statehood and civilization regarding the causes of phenomena and events, as well as applying procedural knowledge in the field specific studies according to their talents and interests in solving problems	3.10. Analyzing the definition, main figures and core teachings of Sufism (Imam Junaid Al-Baghdadi, Rabi'ah Al-Adawiyah, Al-Ghazali, Sheikh Abdul Qadir Al-Jailani).	3.10.1 Identify the definition, main figures and core teachings of Sufism (Imam Junaid Al-Baghdadi, Rabi'ah Al-Adawiyah, Al-Ghazali, Sheikh Abdul Qadir Al-Jailani).
4. Process, reason and present in the concrete and abstract domains related to the development of what they learn at school independently, and are able to use methods according to scientific principles	4.10. Presenting the results of the analysis of the core teachings of Sufism (Imam Junaid Al-Baghdadi, Rabi'ah Al-Adawiyah, Al-Ghazali, Sheikh Abdul Qadir Al-Jailani).	4.10.1. Formulate the results of an analysis of the core teachings of Sufism (Imam Junaid Al-Baghdadi, Rabi'ah Al-Adawiyah, Al-Ghazali, Sheikh Abdul Qadir Al-Jailani).



**Figure 1** Concept Map of Moral Creed Material

2. Design

At this design stage, the author prepares the storyline which is presented in Table 6.

**Table 6** Media Storyline

No	Scene	Board	Audio	Desain
1	Opening	Faculty of Islamic Religion Education Study Program KH University. A Wahab Hasbulloh	Music and video	
2	Introduction	TPACK-Based Audio Visual Learning Media on Moral Creed Material for Class XI MA Nizhamiyah Ploso and MAN 4 Jombang	Music and video	
3	Tujuan pembelajaran	Contains learning objectives including core competencies, basic competencies, indicators, and concept maps.	Music and video	

- 4 Materi - Definition of Sufism and Music and video
- Figures of Sufism
  - Shaykh Abdul Qadir Al-Jailani and the essence of his Sufism teachings
  - Imam Junaid Al-Baghdadi and the essence of his Sufism teachings
  - Imam Al-Ghazali and the essence of his Sufism teachings
  - Rabi'ah Al-Adawiyah and the core teachings of Sufism

**TASAWUF SECARA ETIMOLOGI**

Ditinjau dari segi bahasa (etimologi). Harun Nasution menyebutkan lima istilah yang berkenaan dengan asal kata tasawuf, yaitu:

1. Shafa
2. Saff
3. Shafwah
4. Shuffah
5. theosofi
6. shuf

**TASAWUF SECARA TERMINOLOGI**

Tasawuf dapat didefinisikan sebagai suatu ilmu untuk mengetahui bagaimana cara menyucikan jiwa, mengjernihkan akhlak, memurnikan hati dan luhur, untuk memperoleh kebahagiaan yang abadi. Tasawuf sendiri bukan berarti meniadakan dunia, melainkan menyadarkan manusia bahwa dunia adalah modal atau bekal hidup di akhirat. Kehidupan yang kekal bukan di dunia, tetapi di akhirat. Karena itu, jangan sampai salah meniadakan dunia. Sebab, dunia bukan akhirat dari kehidupan, tetapi sarana untuk mencapai kebahagiaan yang hakiki dan abadi.

**TOKOH TASAWUF**

<p><b>SYAIKH ABDUL QADIR AL-JAILANI</b></p> <p>Laahir pada pertengahan bulan Ramadhan, tahun 471 H di kampung Ilan.</p> <p>Wafat pada hari Sabtu, pada tanggal 11 Rabi'ul akhir di Istail Aasi, 561 H/1166 M.</p>	<p><b>IMAM JUNAID AL-BAGHDADI</b></p> <p>Laahir di kota Nihawand, Persia.</p> <p>Wafat pada hari Jumat, 298 H/910 M.</p>	<p><b>IMAM AL-GHAZALI</b></p> <p>Laahir di kota Tus yang merupakan kota kedai di Khurasan Nipawar, pada tahun 450 H.</p> <p>Wafat di kota Tus, pada hari Senin tanggal 18 Jumadil Akhir tahun 505 H.</p>	<p><b>RABI'AH AL-ADAWIYAH</b></p> <p>Laahir pada tahun 95 H/713 M atau 99 H/717 M di suatu perkampungan dekat Kota Basrah (Irak).</p> <p>Wafat di kota itu, pada tahun 185 H/801 M.</p>
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**VIDEO**

IMAM JUNAID AL-BAGHDADI  
<https://youtu.be/SKi2308ck9A>

**PROYEK**

Membuat klipring tentang tokoh-tokoh tasawuf dan inti-inti ajarannya

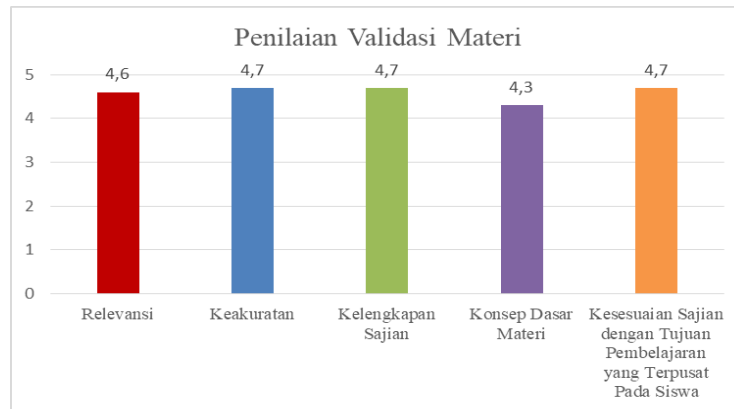
**Quiz**

<https://wordwall.net/play/58288/244/938>

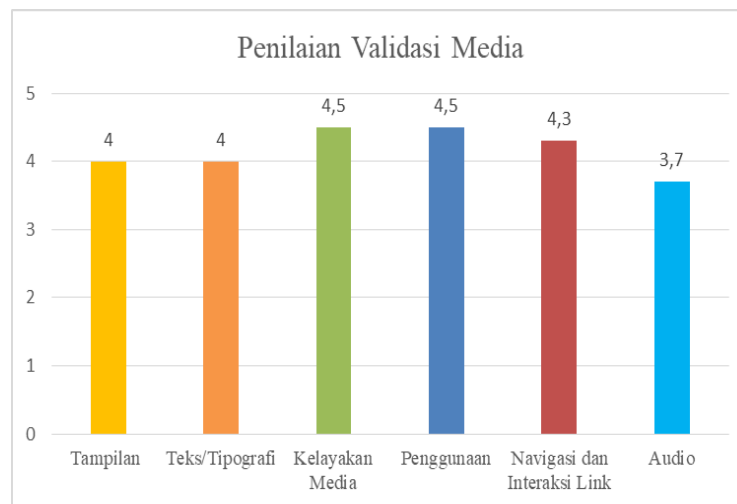
3. Development

After the product has been prepared, the development stage is carried out with the aim of seeing the feasibility of the product and student responses. At this stage, the product will be assessed for

suitability by validators and assessed by students. The appointed validator will assess the material aspects and media aspects, where there are 5 lecturers and 2 teachers. The assessment results from the validator are shown in Figure 2 and Figure 3. Student responses were made by 12 MA Nizhamiyah Ploso students and 21 MAN 4 Jombang students which are presented in Table 7.



**Figure 2** Material Assessment Validation



**Figure 3** Media Assessment Validation

**Table 7** Student Response Score

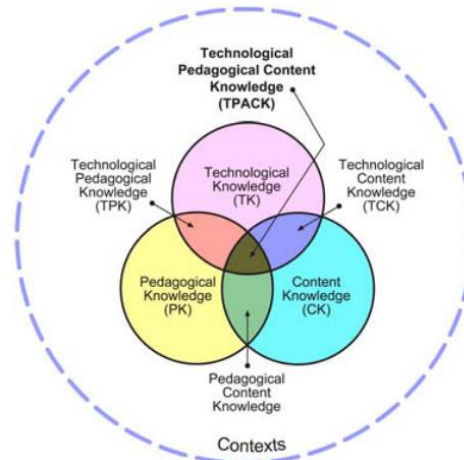
No	Students	Average	Criteria
1.	MA Nizhamiyah Ploso	85%	Very interesting
2.	MAN 4 Jombang	81%	Very Interesting
		<b>83%</b>	<b>Very Interesting</b>

**Discussion**

TPACK is a learning framework that utilizes technology in the learning process, knowledge of the pedagogy used, and knowledge related to the content to be taught (Wang et al., 2018). TPACK is in accordance with 21st century education which requires learning technology in carrying out the learning process (Pujiriyanto, 2019). This is in line with (Armiyati & Habib, 2022; Mairisiska et al., 2014; Quintana & Zelaya, 2015) where TPACK is an integration of technology, materials and pedagogy that interact with each other to produce ICT-based learning.

TPACK is a framework for designing modern learning models by combining three main components, namely technology, pedagogy, and knowledge (Fajero et al., 2021; Hofer et al., 2015; Martin, 2015; Meileni et al., 2022; Quintana & Zelaya, 2015; Suyamto et al., 2020). The three domains are essential for the successful use of technology in teaching and learning . They are a set of skills that span multiple disciplines and must be applied in specific situations to teach

effectively with technology (Quintana & Zelaya, 2015). Figure 4 shows that there are seven different areas of integrated knowledge from educational, disciplinary and technological knowledge.



**Figure 4** The TPACK Model (Koehler et al., 2013; Schmidt et al., 2014)

Learning through TPACK has a significant impact on the learning process through learning media. The results of research (Mairisiska et al., 2014) where the TPACK-based learning tools developed in the form of Learning Implementation Plans (RPP) and Student Activity Sheets (LKS) in the form of e-book pages have optimized student learning activities on the colligative properties of solutions and were able to improve skills. students' critical thinking. In line with (Quddus, 2020) TPACK which is integrated into online learning, can increase student understanding. Utilization of Android-based learning media using TPACK can train, form habits, and provide confidence for prospective teachers in integrating technological knowledge, with content knowledge which refers to a person's understanding of the subject matter, as well as pedagogical knowledge which refers to a person's understanding of the teaching and learning process of subject matter (Akbar & Djakaria, 2023). This is supported by (Kadek Sri Santika Ade Putri et al., 2023) that good learning through TPACK can be integrated by varying learning media such as slides, YouTube videos, Google Forms, Kahoot, Quiziz, WhatsApp groups, Google Classroom, Canva, Instagram, and Google Drive.

## CONCLUSIONS

TPACK-based audio visual learning media on the material on moral beliefs produced has been developed using the ADDIE model, obtaining results after going through the revision and validation stages with an average score of 88% in material validation and media validation obtaining an average score of 84%, the material expert validator and Media experts state that learning media is very relevant and suitable for use. Then, at the test stage, students' responses to the suitability of the learning media obtained an average score of 83% with very interesting criteria.

Some suggestions given to future researchers who are interested in researching TPACK-based audio visual learning media are:

1. The audio-visual learning media that has been developed still has many shortcomings and must be improved so that it is hoped that future researchers can add various animations and other components that can support the attractiveness and suitability of the media.
2. It is possible for future researchers to see the effectiveness of TPACK-based audio visual learning media in the classroom.

The hope of this research is that it can help students understand material, especially moral beliefs, and can help teachers in designing innovative and creative learning so that learning becomes more active and enjoyable through this media. The researchers would like to thank



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