Development of Tutorial Videos to Improve Learning Outcomes of Islamic Education Students

Rafiud Ilmudinulloh*[1], Ahmad Bustomi[2], Widya Rizky Pratiwi[3]

[1] Institut Agama Islam Negeri Manado
[2] Universitas Islam Negeri Jurai Siwo Lampung
[3] Universitas Terbuka
✉ rafiud.ilmudinulloh@iain-manado.ac.id * (Correspondence)

Article Information	Abstract
	The presence of appropriate learning media is needed in practical courses, especially with only 2 credits. Lecturers and students are aware of this, but there has been no serious effort to realize this hope. As a result, learning becomes ineffective and student learning outcomes are low. Responding to this problem, the researcher aims to develop a video tutorial that is suitable for use in the Fiqih Ibadah course to improve student learning outcomes. This study uses 4D development design which consists of defining, designing, developing, and disseminating. Data analysis techniques use test instruments to examine the increase in learning outcomes and questionnaires to test the feasibility of video tutorial. Questionnaire data were analyzed using descriptive statistical formulas, and learning achievement test data were analyzed using the N-gain formula. The results of this study indicate that video tutorials get a good predicate or 4.3 from the media expert, a very good predicate or 4.9 from a material expert, as well as a very good predicate or 4.6 from students, and student learning outcomes obtain an N-gain of 0.6 in the moderate or quite effective category as seen from the average pretest score of 77.5 and the posttest average score of 90. So it can be concluded that video tutorials are appropriate for use in science courses and can improve student learning outcomes.

Keywords: Tutorial Videos, Learning Outcome, Islamic Education Students

INTRODUC0TION

The study of learning and teaching seems endless. Both are the heartbeat that significantly determines the achievement of educational goals. Various efforts continue to be made to enhance and ensure the quality of learning, including incorporating technology into the learning system. These thoughts have led to the emergence of a new field of study, now known as instructional technology. Instructional technology or educational technology is the ethical study and practice of facilitating learning and improving performance by creating, using, and managing appropriate technology resources and processes (Januszewski & Molenda, 2013). One of the enduring focuses in instructional technology research is learning media. Learning media is oriented toward learning problems and needs to facilitate the learning process. According to Sadiman (2020), learning media include anything that can affect students' psychological aspects

for the purpose of learning and teaching through educational communication channels that occur between teachers and students. As a tool, learning media complements the teaching methods used by teachers to achieve learning objectives effectively and efficiently (Puspitarini & Hanif, 2019). learning media can make the learning process more engaging, interactive, efficient, effective, productive, collaborative, and of higher qualit-y (Karo-Karo & Rohani, 2018).

In the digital era, the role of learning media has become extremely important because individuals tend to obtain information and knowledge presented through digital media directly. Learning media can be classified into three types: visual media, audio media, and audiovisual media (Nurfadhillah, 2021). Among these, audiovisual media or video has become the most popular today because it can reach both the auditory and visual senses simultaneously (Fakhriyana & Riayah, 2021). This can be seen from the number of YouTube users in Indonesia, which has reached 139 million, ranking fourth in the world (Annur, 2023). Audiovisual media or educational video is a tool that conveys learning material through visualization supported by sound, facilitating the learning process within an individual (Riyana, 2007). The combination of auditory and visual technology can produce dynamic and engaging content. Video media serves to attract the attention and concentration of viewers, evoke emotions and attitudes, and increase the likelihood of achieving learning objectives effectively and efficiently (Azar, 2011). The elements of learning videos include images, text, sound, and animation, which are processed through specific software to produce a cohesive unit. Several studies have proven that the use of video as an educational medium can improve learning outcomes (Khairani et al., 2019; Yunita & Wijayanti, 2017).

Learning outcomes are the performance achievements obtained by students after undergoing the learning process, which are represented in numerical form and grades. According to Nawawi (2015) learning outcomes are the level of success a student achieves in learning something, which is quantified in the form of scores. Learning outcomes can serve as a measure of whether the learning objectives have been achieved in the cognitive, affective, and psychomotor domains (Andriani & Rasto, 2019). In relation to learning outcomes, learning videos have had an impact on improving students' learning achievements. Wisada & Sudarma (2019) developed a video oriented towards character education through the scientific ADDIE method (analysis, design, development, implementation, evaluation), which, after testing, had an impact on improving students' learning outcomes. Similar research was conducted by Yuanta (2019) in social studies subjects at elementary schools using the ASSURE model (analyze, state, select, utilize, require, evaluate), with satisfying results showing that educational videos were effectively used in classrooms. Learning videos have also proven to be effective when developed for religious subjects, as demonstrated by Tegeh et al. (2019) in Hinduism classes using the 4D model (Design, Define, Develop, and Disseminate). The 4D model was also used by Suryana & Hijriani (2022) in developing learning videos for early childhood education. Learning videos are also effective for practical subjects, as evidenced by Febrianto et al. (2020) in the electrical installation training course.

A search using Publish or Perish on Google Scholar with keywords 'tutorial videos and Islamic Education (2015–2025) returned 100 results. However, none directly examined the use of learning videos in the context of Fiqh Ibadah, indicating a clear gap in the literature. Learning videos with religious content, especially related to Fiqh Ibadah, are still difficult to find. While there are many learning resources available, such

as videos on YouTube, these videos are not specifically created for educational purposes. Learning videos have their own characteristics, as they are deliberately and systematically designed to achieve learning objectives and are fully integrated into the lesson plan.

The author chose Fiqh Ibadah as the focus of this study because it represents one of the fundamental courses in Islamic studies that directly influences students' understanding and practice of daily worship. Topics such as Thaharah (purification) and Salah (prayer) are not only central to the curriculum but also essential aspects of every Muslim's religious life. Preliminary observations and short interviews revealed that students often struggle to fully grasp these practices through traditional classroom explanations alone. Therefore, developing tutorial videos as teaching aids is considered highly relevant, as they provide visual and practical guidance that can enhance comprehension, retention, and application of the material. Based on preliminary observations and brief interviews with the lecturer of the Fiqh Ibadah course, it was found that the lecturer needs teaching aids in the form of tutorial videos on the practice of Thaharah (purification) and Salah (prayer) to improve student learning outcomes. This is because, due to limited class hours, the lecturer cannot provide adequate practical sessions for students. With the availability of tutorial videos on worship practices, it is hoped that learning time can be made more efficient and the achievement of learning objectives can be more effective. A tutorial video is a combination of images and sound that produces a complete display of a process, containing stages, steps, and technical instructions on how to perform a task (Utomo & Ratnawati, 2018). Worship practices refer to the procedures prescribed by religion in performing the commands and prohibitions established by Allah S.W.T. through the Qur'an and Hadith, such as the practices of prayer, zakat (almsgiving), Hajj, and fasting (Ningsih, 2021).

Tutorial videos are suitable for teaching procedural and technical practices because they can display these events in full, allowing someone to replay the video to study and practice the stages presented. To validate the data, expert judgment from *Fiqh Ibadah* lecturers can be used to assess the accuracy and clarity of the tutorial videos, while student feedback through questionnaires or interviews provides insights into their practicality and effectiveness; meanwhile, the analysis is carried out in stages, beginning with reducing and categorizing the data, followed by displaying it in descriptive or tabular form, and concluding with drawing and verifying conclusions to determine the impact of the tutorial videos on students' understanding and performance in *Thaharah* and *Salah* practices. Another advantage of tutorial videos is that students can learn independently without requiring direct guidance from the lecturer.

This study aims to develop tut-orial videos on worship practices to enhance student learning outcomes. The videos will be packaged in a creative documentary format, covering Fiqh Ibadah material on Thaharah and Salah.

METHOD

This study employs a Research and Development (R&D) approach using the 4D Model developed by Thiagarajan, Semmel, and Semmel (1974), which consists of four stages: Define, aimed at analyzing needs, learner characteristics, and learning objectives; Design, focused on developing instruments, strategies, and initial prototypes; Develop, involving the production, validation, revision, and trial of the product; and Disseminate, which emphasizes broader implementation through field testing and publication,

ensuring the product's validity, practicality, and effectiveness. In this study, however, the 4D model has been adapted to align with the contextual problems addressed and the learning product being developed. The adapted 4D model refers to the framework proposed by Maydiantoro (2020) in his article discussing various development models.

This research was conducted at IAIN Manado in the Islamic Religious Education study program, specifically in class PAI3C, with a total of 21 students enrolled in the *Fiqh Ibadah* course. The class was chosen as the research setting because it represents a group of students who are expected to master the basic concepts and practices of Islamic worship as part of their academic and spiritual formation. By focusing on this class, the study seeks to evaluate how the use of tutorial videos can enhance students' understanding and performance in carrying out fundamental practices such as *Thaharah* (purification) and *Salah* (prayer), which are essential for both personal religious observance and professional preparation as future Islamic educators.
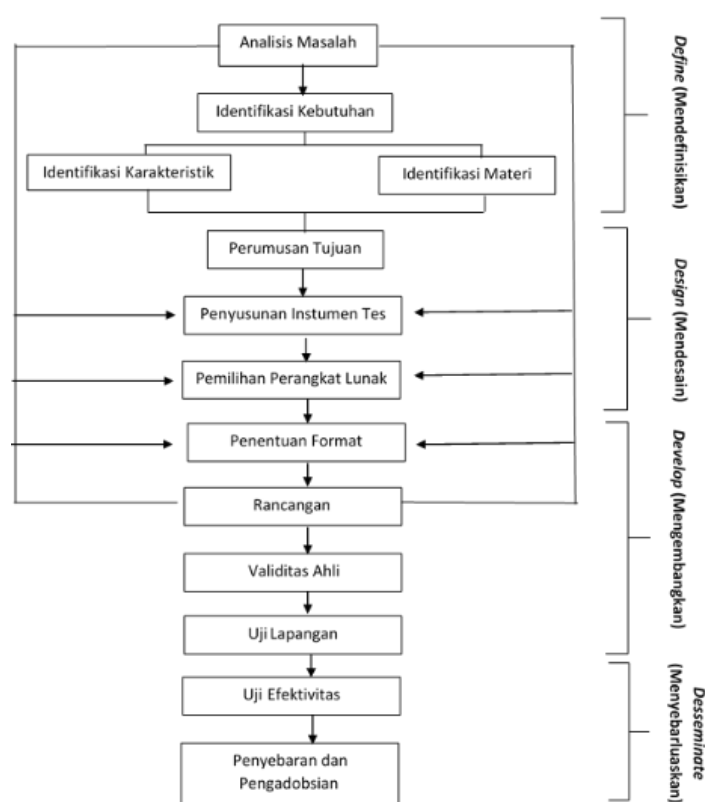
Figure 1. Development Procedure Adapted from 4D (Source: Maydiantoro, 2020)

The first stage involves problem analysis and needs identification, including student characteristics and content (Arvianto & St Y, 2023). **The second stage** covers the formulation of objectives and the development of test instruments (Indaryanti et al., 2025). **The third stage** consists of determining the design format for the tutorial video, selecting software, expert validation testing, field testing, and testing the effectiveness on learning outcomes (Rizki et al., 2016). **The final stage** is the publication of the educational video across various information and communication channels owned by the institution(Gorbi Irawan et al., 2018).

The media feasibility data is collected through validation questionnaires from media experts, content experts, and field tests (Zeraatkar et al., 2017). The questionnaires are constructed using a Likert scale ranging from 1 to 5, from the most negative to the most positive meaning. The results from the questionnaires are calculated using a percentage formula by dividing the partial sum by the total sum and then multiplying by 100 (Simons & Meeus, 2017). The results are then analyzed descriptively and qualitatively to be converted into feasibility criteria tables.

Table 1. Criteria for Expert and Field Validation Testing (Source: Ilmudinulloh, 2021)

SCORE	CATEGORY	NOTE
90–100	Very Good	No Revision
75–89	Good	No Revision
65–74	Fairly Good	Minor Revision
55–64	Low	Major Revision
0–54	Very Low	Major Revision

The effectiveness of the media on learning outcomes is collected using the One Group Pretest-Posttest design(Chang et al., 2022). The difference in scores between the pretest and posttest after the intervention provides an indication of the effectiveness of the developed product(Lai et al., 2023). The object of the assessment is the students' work in creating a presentation slide. The work is calculated using the normalized-gain formula by Hake (2002: 3). The N-gain is determined based on the average gain (g) obtained from the pretest and posttest results with the following formula:

$$Gain = \frac{S_{Post} - S_{pre}}{S_{ideal} - S_{pre}}$$

Figure 2. N-gain Formula (Source: Hake, 2002)

The results are then converted into a classification table to interpret the obtained gain values.

Table 2. Interpretation of N-gain Effectiveness

PERCENTAGE (%)	CATEGORY
< 40	Ineffective
40 – 55	Less Effective
56 – 70	Fairly Effective
> 76	Effective

The table above presents the interpretation of N-gain effectiveness based on the percentage score obtained (Rahman et al., 2024). An N-gain value below 40% indicates that the learning intervention is ineffective, while a score between 40–55% is categorized

as less effective. If the percentage falls within 56–70%, the intervention is considered fairly effective, showing moderate improvement. Meanwhile, a score above 76% demonstrates that the intervention is effective in enhancing students' learning outcomes (Fauzi et al., 2023).

RESULTS AND DISCUSSION

The findings of this study will be presented according to the stages of the adapted 4D development model, which consists of the defining stage (define) that produces an analysis of problems, characteristics, and learning needs of students in the Islamic Education Program, the design stage (design) that produces the script for the educational video, the development stage (develop) that results in the tutorial video product for worship practices, which has been tested for feasibility and effectiveness on student learning outcomes, and the dissemination stage (disseminate) that produces the strategy for publishing the educational video(Tegeh et al., 2019).

Defining Stage

The material of Fiqh Ibadah includes topics on Taharah (purification), Salah (prayer), fasting, zakat, Hajj, and Umrah. The objective of teaching this course is for students to be able to apply these worship practices in daily life and to avoid truth claims that could cause divisions. Based on observations and interviews with lecturers and several students, the available learning hours are too short, making it difficult to adequately discuss both the theory and practice of worship. Lecturers often shorten the theoretical discussion to allocate more time for practical sessions, or vice versa (Rosyidah et al., 2019). On the other hand, students often fail to grasp the details of worship practices as their ability to absorb information varies. Some students need more than one practice session to be able to apply certain worship practices. Students need teaching aids, such as more efficient, flexible, and effective learning media, so that they can access and study worship practices anytime and anywhere (Akbar & Hartono, 2017). The media is intended to complement the material delivered by the lecturer in class. After further investigation, students expressed a desire for each topic to include a tutorial video of the worship practices that can be watched and studied outside of class hours to help students better understand the material presented by the lecturer. Furthermore, new students in the Sharia faculty tend to adapt easily to technological advancements and can easily grasp the material presented digitally (Nabila et al., 2021).

Design Stage

The design of the tutorial video for worship practices was formulated into a video script titled *Purity in Prayer*, discussing material on Taharah and Salah. The expected competency after watching the tutorial video is for students to be able to perform Wudu (ablution), Tayammum (dry ablution), and Fardh Salah (obligatory prayer) in daily life. These competencies are then broken down into seven indicators(Kristanti & Julia, 2017). The tutorial video is formatted as a creative documentary that involves a narrator and a model. The video tutorial is divided into five sections: 1) Introduction to the storyline, 2) Discussion of Taharah, 3) Discussion of Tayammum, 4) Discussion of Salah, and 5) Conclusion. The video script uses a three-column format: visual, audio, and duration.

The visual column includes scene numbers, setting locations, camera angles (CA), types of shots (TS), and transitions (T). The audio column contains the narration delivered by the narrator. The duration column contains the time needed for each scene in the video. There are twenty main scenes and several background videos used in the worship practice tutorial video, with a duration of over 30 minutes(Kurniawan & Dewi, 2017).

Development Stage

The worship practice tutorial video was created and developed based on the video script. This stage is divided into several sub-stages: filming, voice recording, video editing, expert and field testing, video revision, and effectiveness testing on learning outcomes. Filming was conducted at the campus of the State Islamic Institute of Manado, involving a cameraman, director, and model (Suwardi et al., 2019a). Voice recording took place in the Podcast Studio of Rumah Moderasi Beragama, with a narrator using the available studio facilities. The video editing software used was CapCut Desktop version 1.5.1, for both image and sound editing. The editing process aims to combine and synchronize the images, narrator's voice, animation effects, background music, and other materials (Rajagukguk et al., 2021). After the video was completed and exported in high resolution (1080 Pixels), the tutorial video was validated by media experts and content experts. The media expert validation resulted in an average score of 4.3, or 85%, with a "Good" rating and no revision required. Of the eleven statements presented, three received an average score of 5.0, or "Very Good," including the accuracy of images and illustrations used to reinforce the message in the video, the ease of understanding the content of the educational video, and the appropriateness of the video with the characteristics of the students. The other eight statements received an average score of 4.0, or "Good," which covered criteria such as suitability, attractiveness, clarity, and flexibility (Suwardi et al., 2019b). Meanwhile, the content expert validation resulted in an average score of 4.9, or 97.1%, with a "Very Good" rating and no revision required. Of the fifteen statements presented, twelve received a maximum average score of 5.0, or "Very Good," covering aspects such as clarity, readability, attractiveness, and content. The remaining three statements received an average score of 4.0, or "Good," which included the practicality and systematization categories (Qorib et al., 2021).

After receiving recommendations from the experts, field testing was conducted with small and large groups. The small group test involved ten randomly selected students, while the large group test involved thirty randomly selected students (Anwar et al., 2022).

Figure 3. Field Test Results
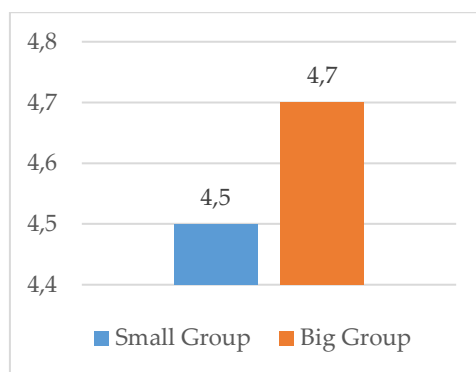
The small group test received an average score of 4.5, or 90%, with a "Very Good" rating. Three students gave an average rating of 5.0 for each statement presented (Rohman et al., 2021a). The lowest average rating was 3.9, with the lowest score of 3.0 given for the accuracy of images or illustrations and the attractiveness of the developed product. The large group test received an average score of 4.7, or 93.2%, with a "Very Good" rating. Ten students gave an average rating of 5.0, or 100%. The lowest average rating was 3.9, with the lowest score of 3.0 given for the appropriateness and clarity of the content.

Figure 4. Comparison of Expert and Field Test Results
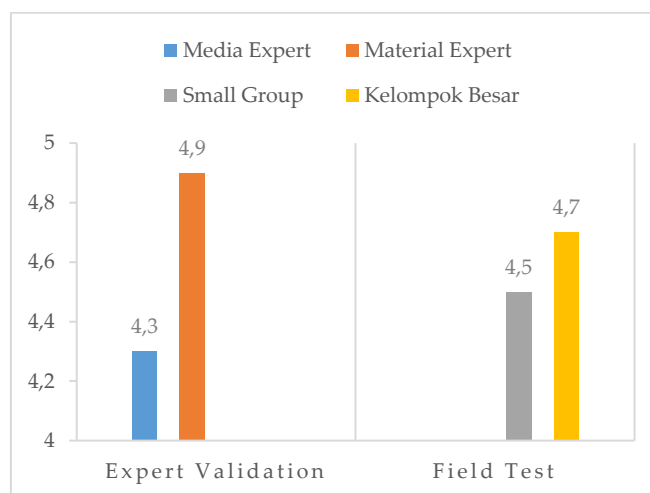
The diagram above compares the average scores from the expert validation test and the field test (Mukarromah & Andriana, 2022). The highest rating was given by the content experts, with a score of 4.9, or 97.1%, rated as "Very Good." Next was the large group test, with an average score of 4.7, or 93%, also rated as "Very Good." Following that was the small group test, with a score of 4.5, or 90%, rated as "Very Good." The lowest rating was given by the media experts, with a score of 4.3, or 85%, rated as "Good." When taking the overall average score for the development product, the "Worship Practice Tutorial Video" received an average score of 4.6, or 92%, with a "Very Good" rating. Nevertheless, the researcher continued to improve the development product

based on the field notes and feedback provided by students and lecturers (Hada et al., 2021).

Table 3. Learning Outcome Improvement Test

Test	Learning Result Scores				Gain
	Min	Max	Average	SD	
Pretest	58	89	77.5	10.42	0.6
Posttest	73	100	90	6.77	

Based on **Table 7**, the N-gain is calculated as 0.6 from the difference between the pretest and posttest scores, divided by the difference between the ideal score (100) and the pretest. The value of 0.6 falls within the moderate category, as it is between 0.7 and 0.3. The value of 0.6 corresponds to 56.1%, which, when converted into **Table 2**, falls under the "Fairly Effective" category (Afifah et al., 2022).

Dissemination Stage

The dissemination strategy used by the researcher involves publishing the developed tutorial video through the researcher's personal YouTube channel so that anyone can access it by typing the video tutorial title, "Suci Dalam Doa | Fiqih Ibadah." YouTube is used as a data storage directory and an interactive media platform for engaging with viewers to obtain feedback, comments, and recommendations for further video development on other topics needed by students (Gulo & Harefa, 2022). After posting the video, the video link is included in the **RPS** (Syllabus) and **LMS** (Learning Management System), which is managed by the lecturer to be shared with anyone in need. The course lecturer adopts the tutorial video as a teaching medium to be used in the Fiqih Ibadah course (Monoarfa & Haling, 2021).

The developed tutorial video using the 4D model received a "Good" rating in terms of both media and content, and a "Fairly Good" rating in terms of its impact on improving learning outcomes (Rohman et al., 2021b). This achievement is attributable to the application of principles in video development that consider cognitive load, student engagement, and active learning (Brame, 2016). An effective educational video must be able to manage and control the cognitive load present in the video content, as it affects the process of information absorption by students. This principle is explained in the cognitive load theory proposed by Sweller (2011) in the late 1980s. The theory suggests that information is received by the sensory organs, processed by sensory memory, transferred to working memory, and stored in long-term memory. Sensory memory is responsible for verifying whether the information will be processed or discarded. Working memory functions to organize, interpret, and link information to past experiences, while long-term memory serves as a storage space for information that can be recalled when needed. The theory identifies three important components in the learning experience: intrinsic load, germane load, and extraneous load. Intrinsic load comes from the content being learned, germane load relates to the prior knowledge

students have, and extraneous load arises from the conditioning of the information delivery process involving various aspects.

Cognitive load theory argues that cognitive load can be manipulated and managed within a well-designed learning process to achieve effective learning. Intrinsic load from the content should be simplified and summarized without losing the substance of the teaching material (Chen et al., 2023). Germane load should be maximized so that it integrates with prior learning experiences, creating permanent new knowledge networks. Extraneous load must be minimized to alleviate cognitive load during learning (Sweller, 2023). The cognitive load theory was later adopted by Mayer (2009) in his Cognitive Theory of Multimedia Learning. This theory assumes that humans process information through two channels: visual and auditory (Dual Channels), that humans have limited memory capacity for processing information from both channels simultaneously (Limited Capacity), and that humans actively integrate and organize new information with existing knowledge and experiences to form a coherent whole (Active Processing). This assumption led to the formulation of five basic principles to anticipate excessive cognitive load, including: avoiding incoherent text, sound, or images (Coherence), considering redundancy in all aspects (Redundancy), emphasizing content in the teaching material (Signaling), placing text and images proportionally on the screen (Spatial Contiguity), and ensuring they reinforce each other by not being too far apart when presented together (Temporal Contiguity).

The development of the worship practice tutorial video used Sweller's cognitive load theory as the basis for designing the video content, which includes selecting materials, delivery strategies, and video script writing. The evaluation of cognitive load was entrusted to content experts to review its compatibility with all learning components (Ellerton, 2022). The worship materials selected were sourced from one school of thought (Mazhab), namely the Shafi'i Mazhab, to make the discussion simpler and clearer. Additionally, the Shafi'i Mazhab is the most widely followed teaching among Muslims in Indonesia, making it easier for students to accept, as these practices are generally well-known and frequently observed or practiced by the community, including the students themselves (Wilby & Paravattil, 2021). Meanwhile, Mayer's multimedia cognitive theory served as a guideline in the process of creating the tutorial video, including filming, selecting sound effects, music, and animations, and integrating all the content included in the video. The evaluation of the application of these principles was assigned to media experts and students, who provided suggestions and feedback for improving the quality of the developed tutorial video.

Figure 5. Application of Mayer's Cognitive Theory Principles

Figure 5 is taken from a video clip at 13 minutes and 27 seconds, summarizing the steps of Tayammum at the end of the material discussion. This section includes a title at the top, text on the left, and a video clip on the right. The title of the video refers to the **Signaling** principle by creating gradation in color, type, and effects of the text. The placement of the text and video refers to the **Coherence**, **Spatial**, and **Temporal Contiguity** principles, where the text supports each scene displayed in the video clip on the right side of the screen (Skulmowski & Xu, 2022). One principle that is not fully adhered to in this image is the **Redundancy** principle, as the background of the video clip displays a repetition of the same video footage as the small video on the right side of the screen. Although this video clip slightly violates the redundancy principle, it is still aided by the transparency effect used on the background video and is further obscured by the black background behind the text and video clip, allowing the viewer to maintain focus on both objects (Krieglstein et al., 2023).

The principle of student engagement and active learning is applied by controlling the duration of the discussion so that it is not too long, using communicative language, narrating with a relatively fast pace and enthusiasm, and developing the video according to its intended purpose (Curum & Khedo, 2021). The worship practice tutorial video is accompanied by a timeline containing time markers and explanations within the video.

Figure 6. Video Tutorial Timeline

```
00:31 Pendahuluan
03:03 Pengertian Thaharan
03:31 Hadast Kecil
04:24 Pengertian Wudhu
04:41 Rukun Wudhu
05:55 Tatacara Wudhu Berserta Sunnahnya
08:59 Tayammum
09:53 Syarat Sah Tayammum
10:15 Rukun Tayammum
13:40 Pertanyaan Diskusi
14:12 Pengertian Sholat
15:39 Waktu - Waktu Sholat Fardu
17:50 Syarat Sah Sholat
20:20 Rukun Sholat Berserta Sunnahnya
33:06 Pertanyaan Diskusi
33:19 Penutup
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The researcher added a discussion timeline included in the video description to help viewers select the material they wish to learn by clicking on the timestamp in the video, which is highlighted in blue (Shoufan & Mohamed, 2022). When the viewer clicks on the timestamp, they are automatically directed to the corresponding material. This feature is important given the video's relatively long duration of 33 minutes. The language style used by the narrator is inspired by YouTube channels that feature Islamic content, such as Islam Populer, Khasannah Islam, Kisah Islam, and Ensiklopedia Islam. The material is packaged under the theme "Purity in Worship," with a prologue from the narrator introducing the content before the main discussion (Osman et al., 2022). The tutorial video is developed as a teaching medium for lecturers in class or as a learning resource for students outside the classroom.

Figure 7. Questions in the Tutorial Video

Materi Wudhu dan Tayammum
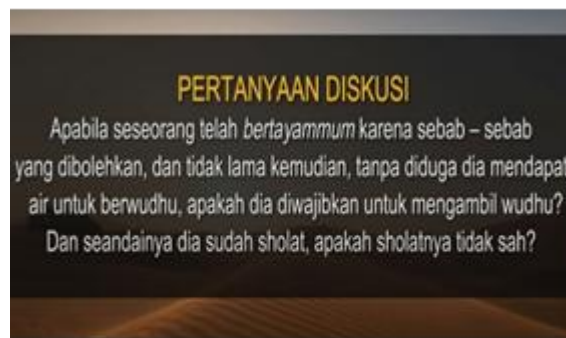
Materi Sholat
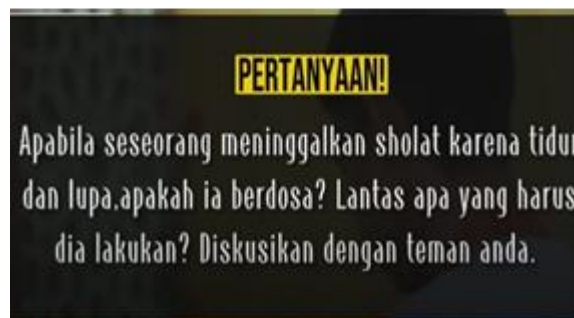
The questions above are included to encourage active learning processes, and are therefore based on case study examples. Through these questions, it is expected that students will be able to use specific evidence to support their arguments (Sui et al., 2022). The context above aligns with the principle of active learning, which includes questions as a stimulus to stimulate students' thinking activities.

In addition to the three principles outlined by Brame, there are five other principles to enhance the effectiveness of educational videos, namely: making images and text more dynamic, including narration or instructions that guide viewers to engage with the video, involving generative learning activities, presenting the content from a first-person perspective, and adding subtitles for narration or text that uses foreign languages (Mayer et al., 2020). In short, educational videos do not only play a passive role in delivering knowledge to students, but also play an active role in stimulating learning activities. In terms of improving the quality of learning, educational videos hold great potential, not only in conveying messages but also in facilitating the transformation of teaching methods (Fyfield et al., 2019). The use of educational videos that align with students' needs has many benefits in creating engaging and meaningful learning experiences (Suryana & Hijriani, 2021). Educational videos can increase student attention, simplify complex information, and overcome the limitations of space and time (Rasagama, 2020; Tohari et al., 2019).

The use of educational videos can have a positive impact on motivation, student engagement, and learning outcomes (Kamlin & Keong, 2020). This is consistent with Edgar Dale's *The Cone of Experience* theory, which suggests that audiovisual media contribute to 50% of what students understand and experience (Molenda, 2012). Students' understanding improves when audiovisual media is combined with direct, real-life experiences. This theory posits that the more concrete the educational media

used, the greater the learning experience students gain (Jackson, 2016). Today, educational videos have become one of the most popular media for delivering lessons to students (de Koning et al., 2018) due to their benefits in increasing motivation, interaction, and concentration, being easy to control, access, and disseminate, and having a positive impact on the effectiveness of learning (Beheshti et al., 2018). Student motivation and concentration are enhanced through the use of visualizations and animations to present learning materials (D'Aquila et al., 2019; Mardhian Ningrum et al., 2021; Puspitarini & Hanif, 2019). The impact of educational videos on interaction and student engagement must be supported by the implementation of effective teaching methods such as discussions, question-and-answer sessions, or assignments. Educational videos also influence learning effectiveness, which can impact learning outcomes and other achievements (Rahmawati et al., 2021; Ridha et al., 2021).

Specifically, tutorial-based educational videos are highly effective for demonstrating events or procedures that involve images, sound, and movement (Batubara & Batubara, 2020). Erni & Farihah (2021) recommend developing tutorial-based educational videos for practical courses. This is supported by their research on a sewing technology course, where the developed tutorial videos were able to increase student motivation and learning outcomes. In the field of engineering, tutorial videos can improve students' competency in 3D drawing (Musthofa & Murdani, 2018), enhance learning outcomes in Digital Simulation and Communication subjects better than methods that do not use tutorial videos (Mokoginta et al., 2021), support student independence in learning (Kusnadi et al., 2018; Pujawan, 2019; Rahmad et al., 2018), and improve students' skills in creating dimensional animations (Sutrisno et al., 2020). In sports, tutorial videos are effective in improving students' skills in basic throwing techniques for pétanque (Saputri & Suwiwa, 2022), and in helping students understand the techniques for volleyball passing (Pratama et al., 2021), as movements that may be difficult for students to demonstrate can be manipulated through advanced video editing applications, making them appear easier and more detailed (Darsana et al., 2021). In religious studies, tutorial videos have been found effective in assisting students in practicing sermons (Riyanto & Yunani, 2020).

The application of the *highlighting* principle in tutorial videos visually helps students understand chemical representations (Rodemer et al., 2021), and the application of the *dynamic drawing* principle makes it easier for students to engage and participate in class, thus making learning more effective (Wahyuni et al., 2021). However, according to Beheshti et al. (2018), educational videos in general face several challenges, including the need for supporting devices such as laptops, computers, smartphones, or similar devices, LCD projectors, speakers, well-lit rooms, and so on. The production process itself is not easy, which is why developers must at least have basic video editing skills through specific applications. On the other hand, if not combined with effective teaching strategies, tutorial videos will only make students more individualistic and difficult to control.

CONCLUSION

The tutorial video developed using the 4D research design (Define, Design, Develop, and Disseminate) is deemed feasible and fairly effective in improving students'

learning outcomes on the topics of Taharah and Salah. This is evidenced by the results of the expert media validation test, which received a "Good" rating of 4.3, the expert content validation test, which received a "Very Good" rating of 4.9, and the field test, which received a "Good" rating of 4.4. The improvement in learning outcomes was determined through the calculation of the standard gain from pretest and posttest scores, which reached 0.0 or 56%, categorized as moderate or fairly effective. The results of this study are attributed to the application of theories and basic principles of video-based learning development. However, the researcher faced limitations in controlling other variables that could influence students' learning outcomes; therefore, further research is needed to achieve a higher level of effectiveness.

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