Developing Lampung Local Wisdom Film of Arabic Communication Skills for Madrasah Tsanawiyah Students

Koderi*, Muhammad Sufian, and Erlina

Abstract—Lampung Local Wisdom Film development for Arabic can improve students' low Arabic communication skills. This research aims to develop, validate, analyze user responses, and analyze the effectiveness of Lampung Local Wisdom Film for Arabic Communication Skills. This study uses a mixed-method approach with the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) research and development model. The researchers employed observation, interviews, documentation, questionnaires, and tests as the data collection methods and then analyzed the data with sequential explanatory designs. Material and media experts assessed Lampung Local Wisdom Film and declared the product appropriate for Arabic Communication Skills. Students' responses showed that the product was highly interesting for learning. The effectiveness test results showed that the value of $t_{observed}$ was 66.678, which was higher than the $t_{critical}$ of 2.093. Therefore, the Lampung Local Wisdom Film for Arabic Communication Skills proved feasible, engaging, and effective in learning Arabic.

Index Terms—Film media, local wisdom, Arabic communication skills

I. INTRODUCTION

Arabic language instruction in Indonesia begins in elementary and high school, prioritizing mastering vocabulary, communication, and grammar. Arabic language study in Indonesia has evolved with technological advancement [1–3]. In keeping with the advancement of the digital era, which is centered on technology and communication, technology is a vital requirement for improving the effectiveness of Arabic language learning [4–6]. Learning Arabic aims to help students develop Arabic language skills while understanding Arabic culture and traditions [7, 8].

Arabic language skills include four main points, namely: listening skills (*maharah istima'*), speaking skills (Arabic communication skills), reading skills (*maharah qiro'ah*), and writing skills (*maharah kitabah*) [9, 10] The capacity to effectively explain oneself in Arabic in both professional and casual settings is known as Arabic communication skills [11]. Students learn about the Arabic language, grammar, and communication skills [11]. Arabic communication skills are critical in Arabic language learning because they assist students in acquiring the capacity to speak orally, boost self-confidence, understand Arabic culture, and serve as the foundation for other Arabic language skills.

Statistics in the field based on Madrasah Tsaawiyah

observations show students' Arabic communication skills are still relatively inadequate. According to the findings of interviews with Arabic language teachers at Madrasah Tsaawiyah, students are still not confident in speaking, are poor in understanding vocabulary (*mufrodat*), have the incorrect pronunciation of Spellings, and do not grasp a precise sentence structure (*qowaid*). One of the factors behind the students' lack of interest in learning Arabic, which they regard as challenging, is their lack of interest in developing their communication skills in Arabic. Also, students do not pay attention when the teacher delivers Arabic communication skills learning materials.

According to the findings of interviews conducted at Madrasah Tsaawiyah, the school has not integrated technology-based learning and continues to rely on printed media. The school's potential promotes learning how to use technology to overcome the difficulty of acquiring Arabic communication skills by creating learning media [12].

Learning media significantly assists language learning, particularly in developing Arabic communication skills. It may deliver information in various formats, such as audio, video, film, graphics, or animation [13]. Learning media can extend student awareness by giving diverse information and opinions. Learning media can provide a learning environment distinct from the traditional classroom setting [14, 15]. Learning media has several advantages, such as increasing interest in learning, facilitating concept understanding, adding variety to learning, facilitating independent learning, reaching students in all locations, providing more diverse learning materials, and facilitating more efficient and effective learning [16–18].

One form of learning media that can be used to learn Arabic communication skills is developing educational films. An educational film is a medium that presents audio and visuals and contains learning materials to help understand the learning material. Films are recognized as a practical educational resource for improving knowledge retention and desired behavior [19]. Watching and reflecting on films can engage students and enable a deeper understanding of complex concepts [20]. Learning movies have several advantages, including: increasing visual appeal, improving memory, providing attractive alternatives, increasing creativity, and can be reused [21]. Films allow students to learn independently using their Android devices wherever and whenever they want [10]. Films can be utilized as Arabic language learning media to improve students' Arabic communication skills.

When local wisdom is incorporated into the construction of educational films, it makes them more entertaining. Lampung is a region in Indonesia located on the island of Sumatra. It has various cultures, customs, traditions, and local tourism potential. The local wisdom preserved through

this educational film is the *Nyeruit* tradition and Lampung tourism. *Nyeruit* is a tradition of eating to foster the value of togetherness between family members in Lampung society. This tradition is usually done at weddings, traditional events, or religious ceremonies. *Nyeruit* must be preserved as a potential of Lampung gastronomic tourism [22–25]. Besides *Nyeruit*, Lampung has famous tourist destinations: Pahawang Beach, Tanjung Setia Beach, Kilauan Beach, Sari Ringgung Beach, Klara Beach, and Marina Beach.

Lampung's local wisdom is a heritage that must be preserved for the younger generation by integrating Arabic language learning in schools. Therefore, the younger generation must have Arabic communication skills that integrate with local Lampung culture. The purpose of this integration is intended so that students have Arabic communication skills and can build their identity with a sense of pride in their local culture and heritage. As a result, they can provide information to tourists from outside of Lampung.

Previous research related to learning with films could make students more cognitively active and can be more meaningful [26, 27]. Films can also facilitate the improvement of students' skills [28] in terms of communication skills, critical thinking skills, collaboration, and creativity [29–33]. Learning with the film is considered more cognitively stimulating. Overall, movie-based learning is a promising pathway to connect theory and practice in learning [34]. Films can also increase one's interest and understanding in information seeking [35–38]. Researches show that films are feasible and effective in learning [14, 24–29].

However, the films developed in the previous studies did not contain stories about contextual material. Hence, they could only increase reading motivation, modify behavior, and strengthen animation principles understanding. The film developed in this study contains Lampung's local wisdom as a novelty in Arabic language learning. The development of an educational film based on Lampung's local wisdom has not been developed, especially in improving Arabic communication skills.

Researchers developed an educational film integrated with Lampung local wisdom because it can improve students' understanding of factual and conceptual material and enhance students' learning interest [23, 39–42]. When combined with local wisdom-based learning, students can benefit from social growth, skills development, and cultural and environmental values [29]. The aspect of local wisdom can give real-life learning experiences for students [30]. Local wisdom-based learning allows students to study in an environment that is familiar to them [28]. This aspect makes learning more relevant and helps students relate theory to practice in everyday life [30]. This makes learning more relevant and makes it easier for students to connect theory with practice in everyday life [32]. Local wisdom-based learning assists students in developing their own identities and a sense of pride in their local culture and traditions [33, 34]. Local wisdom-based learning allows students to learn from a context close to their daily lives [43–45].

Research relevant to local wisdom makes it easier for students to connect theory with practice in everyday life [40]. Local wisdom-based learning helps students build their identity and develop a sense of pride in their local culture and

heritage [46, 47]. This sense is important in strengthening students' sense of identity and reducing the loss of cultural identity in society, especially Lampung culture, which is declining. However, previous research has not integrated Lampung's local wisdom and Arabic communication skills learning.

Based on this concept, the researcher created an educational film for Madrasah Tsanawiyah students to master Arabic communication skills to provide students with learning experiences more relevant to Lampung's social, environmental, and cultural settings and conditions. This research allows Arabic communication skills to be easily achieved, fun, and not considered difficult. Therefore, students can explore local Lampung tourism.

This study aims to create, test the feasibility, and evaluate the usefulness of Lampung local wisdom-based educational films for students at Madrasah Tsanawiyah learning Arabic communication skills.

II. LITERATURE REVIEW

A. Arabic Communication Skills

Communication is the simultaneous sharing and giving of meaning through symbolic interaction [35]. Another definition of communication is "verbal communication, written communication, nonverbal communication, listening, and providing feedback [36]. Similarly, Hikamah *et al.* [37] defines communication as nonverbal skills, providing feedback, conveying ideas orally and in writing, making presentations, and negotiating to achieve a goal and gain support or agreement.

Arabic communication skills are the capacity to efficiently and clearly express thoughts, ideas, and feelings in Arabic. Correct grammar, proper vocabulary, accurate tone, and clear pronunciation are all components of good communication skills. Vocabulary that has been memorized influences speaking skills. Kilic [38] demonstrates that vocabulary predicts speaking and writing skills.

He and Luo [39] defines speaking skill as the ability of students to appropriately explain images using grammar and to use the language acquired to construct sentences. They can use their understanding of vocabulary and sentence patterns to learn conversation until they can speak the language learned in the context of the topic, both in and out of the classroom. In Arabic communication skills, students must know and memorize *mufrodat* to communicate in Arabic.

Communication skills are required for learning. Excellent communication skills enable us to express our learning aims and objectives to students [36] with ideas, thoughts, opinions, knowledge, experiences, and emotions. As a result, communication is a process of exchanging or sharing information between the sender and receiver of information [39]. The communication process generally involves four elements: speaker, receiver, communication channel, and feedback. Communication is more effective if the recipient (information) can understand and practice the core skills [40, 41].

Furthermore, the communication process will be more meaningful if individual and environmental factors are integrated. Contextualized communication environments and

materials will allow students to learn and have good communication skills [37]. Therefore, Arabic communication skills materials need to be integrated with local wisdom. Local wisdom learning materials can increase students' motivation to participate more in classroom communication by asking, responding, expressing facts, or finding innovative understanding [42]. This concept shows that integrating contextualized local wisdom learning with Arabic can make students excited and attentive to learning.

B. Local Wisdom

Local wisdom is collective knowledge, beliefs, and practices from generation to generation within a certain community or culture. It encompasses values, rituals, traditions, and ways of life that are distinctive to a specific group of people and have evolved in reaction to their environment and historical experiences [43, 44]. Local wisdom can be a great source of learning, particularly for schooling that strives to broaden perspectives and encourage student creativity about cultural variety. This statement is consistent with the findings of Hastuti [43], which used local wisdom-based digital book media as a learning resource for students composing short tales and found it to be successful in improving student creativity.

Local wisdom in learning can be utilized by developing learning media, such as the development research [29, 31] to create local wisdom-based animation media that can improve learning outcomes and build student character [29, 31]. This statement is consistent with what Dwianto [45] said about how adding local wisdom into the teaching and learning process can help develop scientific process skills and scientific attitudes. Furthermore, because the substance of the material is directly related to students' minds, local wisdom-based teaching easily attracts students' attention to focus on the information. It makes it easier for students to understand the material related to their daily life [46].

Local wisdom-based learning is more interesting when integrated with educational Film to improve Arabic communication skills. Films tend to make students easily remember and understand lessons because they do not use one type of sense but two at once: the eyes and ears [47]. Therefore, students can see, hear, and say things around them visually in learning Arabic communication skills.

C. Educational Films

An educational film is a medium that conveys learning material through moving visuals, cinematography, or sequenced images [48]. Documentaries, animations, and narrative films deliberately structured for learning objectives are examples of educational films [48, 49]. Educational films can be utilized for various purposes, including classroom learning, training, and distance education [50–52].

Adopting educational films has various benefits, including increasing student attraction and interest in learning, facilitating active learning, improving information retention, and stimulating student creativity and critical thinking [53, 54]. Films media also provide messages that can be received more evenly by students, is effective in explaining a process, overcomes time and space limitations, is more realistic, can be repeated and stopped as needed, and gives a deep impression that can affect student attitudes [47, 55, 56].

Numerous studies have demonstrated that combining movies and learning can improve student motivation, learning competency, and learning outcomes [57–60]. However, there are some drawbacks to using learning movies, including relatively high production costs and a lack of flexibility in adapting film content to different learning needs and conditions, erratic and unfocused behavior while learning, delaying learning at will, and interaction with others while using educational films [19, 61].

Careful and effective preparation and utilization of educational films are required to take advantage of the benefits and overcome the drawbacks. Educational films should be adapted to the learning objectives and targets to be attained and presented with approaches and language easily comprehended by students.

Furthermore, it is also essential to integrate educational films with other learning methods and strategies to achieve optimal learning outcomes, such as integrating with local wisdom to improve students' Arabic communication skills. It makes learning more relevant, strengthens students' sense of identity, reduces the loss of cultural identity in an increasingly globalized society, and makes it easier for students to connect theory with practice in everyday life [32] so that learning Arabic Communication Skills is more fun and effective.

III. RESEARCH METHOD

This study aims to develop and test educational films' feasibility, response, and effectiveness based on Lampung's local wisdom for Arabic Communication skills for the eighth Madrasah Tsanawiyah students.

This research is a research and development using the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) development model [62–64]. The data was analyzed using sequential explanatory designs by combining data compiled from qualitative data and reinforced by quantitative data [65]. Data collection techniques were carried out by observation, interviews, and documentation to obtain qualitative data, followed by quantitative data using tests.

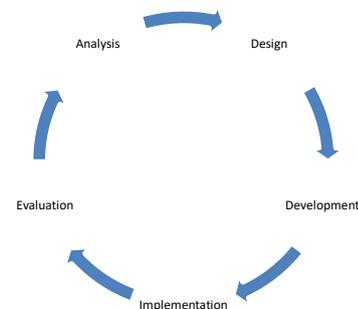The development stages according to Fig. 1 are as follows:

Fig. 1. The steps of the ADDIE development model [62].

A. Analysis

The analysis consists of two stages: performance analysis and needs analysis. Performance analysis is conducted to determine and classify problems related to Arabic language

learning materials, methods, processes, and media used in schools. Solutions are found by improving or developing learning media. Needs analysis as qualitative data is needed to describe the materials, methods, and learning media in improving Arabic communication skills.

The researchers employed observation, interviews, and documentation to obtain data in this stage. The observation was carried out to obtain preliminary data on the research. Here, the researchers determined the object, prepared observation sheets, made systematic and structured observations, recorded data, and analyzed and concluded the results of observations [66].

The teachers and students were interviewed to obtain information on the material process, method process, and Arabic language learning media used through the stages of determining the theme, compiling a list, determining the source, recording the results, and analyzing and concluding [67]. Documentation was performed on student learning outcomes data to strengthen the data from observations and interviews.

B. Design

The product design stage involves material planning, script preparation, flowchart, and storyboard making. The learning material for Arabic communication skills was designed by integrating Lampung's local wisdom about *Nyeruit* and tourism.

C. Development

The development stage was carried out based on the flowchart and storyboard. After the educational film media had been completed, media experts and material experts validated the media. Before validating the data, an instrument was first developed. The instrument was a questionnaire sheet with a value scale format 4, 3, 2, 1 [68]. A value of 4 is excellent, 3 is high, 2 is moderate, and 1 is poor. The formula employed to calculate the average score of the validator's responses was the percentage formula: the number of respondents who answered divided by the number of validators multiplied by 100.

D. Implementation

Implementation was carried out after the final draft was validated and revised. The implementation was conducted with 20 students as the users. The implementation was carried out in two stages, namely, the stage of seeing students' responses to the final draft and testing the effectiveness of the final draft. Data on student responses to the final draft was obtained through a questionnaire sheet with a value scale format of 4, 3, 2, 1 [68]. A score of 4 is strongly agree, 3 is agree, 2 is disagree, and 1 is strongly disagree. The formula for calculating the average score of students' responses to the final draft was the percentage formula: the number of respondents who answered divided by the number of students multiplied by 100.

E. Evaluation

Furthermore, the effectiveness of Lampung local wisdom film for Arabic communication skills was determined through pre-test and post-test with a rating scale sheet of 4, 3, 2, 1 [68]. A score of 4 is excellent, 3 is high, 2 is moderate, and 1 is poor. After the data was collected, it was analyzed using a quantitative approach in the form of a t-test [18, 69, 70]. Before the t-test, pre-requisite tests were carried out to determine the normality and homogeneity of the data [71].

IV. FINDING AND DISCUSSION

A. Development and Evaluation

The ADDIE model was used to create Lampung local wisdom-based educational film media. The employment of this model generates efficient products with an evaluation at each stage to limit the number of errors or product flaws in the final stage [72]. The following are the findings:

1) Analysis

Learning in Madrasah Tsanawiyah to this day utilizes book media, and there are no supporting media in the learning process. Therefore, students feel bored in the Arabic language learning process, resulting in students not being active in learning activities. Furthermore, many students are less active in Arabic communication skills because they find it difficult to understand the material delivered by the teacher. One of the media that can meet these needs is an educational film based on Lampung's local wisdom for learning Arabic communication skills. An educational film based on Lampung's local wisdom can develop imagination and provide concrete learning experiences for students. Therefore, developing an educational film integrated with Lampung's local wisdom for learning Arabic communication skills is necessary.

2) Design

The design of the Lampung local wisdom-based educational film includes an opening scene, educational film material, interactive evaluation, and a conclusion.

3) Opening scene

The thumbnail and title of the educational film are displayed in the opening scene. There is also the name of the educational film developer and learning objectives. Learning objectives contain goals to be achieved in learning Arabic communication skills.

Fig. 2. The opening scene of the film.

Fig. 2 shows the thumbnail and title of the educational film play an important role in capturing the audience's attention and providing a brief overview of the topic to be discussed. With this display, viewers can quickly identify the subject of the film and decide whether it is relevant to their interests or needs. Furthermore, by including the name of the developer, valuable information about the credibility and source of the content are presented. It allows viewers to recognize and establish a connection between the film and the developer, which can serve as a further point of reference. After the

thumbnail and title, the next is the display of learning objectives.

Fig. 3. The Learning objectives' display.

Furthermore, Fig. 3 shows that the learning objectives are a key aspect of this educational film. In this context, the learning objectives are designed to focus the learning efforts on developing communication skills in Arabic. These objectives may involve mastering vocabulary, grammar, speaking, listening, reading, and writing in Arabic. With clear learning objectives, learners can direct their learning efforts more effectively and purposefully.

4) The content of the film

The educational film features a sequence of animated dialogues with the concept of *Yaumiyatuna* and *murodat-mufrodat* related to the subject. The local wisdom-based educational film is offered in simple animation with simple words. This educational film tells the story and includes images of *mufrodat* and supporting text that explains the conversation's topic. The story in this film is a trip to build a sense of togetherness. Students travel to Pahawang Beach to know the beauty of the beach and snorkeling to see the beauty of the underwater world in the form of marine animals, coral reefs, and clean sea panoramas. The movie also tells the story of students' togetherness in eating *Nyeruit* at the Pahawang beach resort as a form of maintaining Lampung's local culture.

Fig. 4. The dialogue content in the film.

In Fig. 4, a dialogue about planning a trip to Pantai Pahawang is presented. The conversation is depicted in a simple dialogue format. The students will be going on a tour to Pantai Pahawang to explore the beauty of the beach and engage in the cultural activity of Nyeruit as a way of preserving Lampung's heritage.

Fig. 5 showcases the vocabulary used in the film. Fig. 5 displays *Mufrodat* images accompanied by supporting texts that explain the topic of discussion. It enables the audience to understand the meaning and purpose of the educational film.

Fig. 5. The portrayal of *Mufrodat* (vocabulary) in the film.

5) Interactive evaluation

The Lampung local wisdom film for Arabic communication skills has an advantage over other films because it has an interactive evaluation at the end so that students become active. The interactive evaluation will improve and familiarize students with Arabic communication skills after seeing and hearing the film. If the evaluation score is less than the minimum completeness criteria, students are asked to watch the film again.

6) Development

The Lampung local wisdom-based educational film was created utilizing a computer/laptop with an internet browser installed, a photo editing program, Adobe Flash Premier Pro 2019, Adobe Photoshop CS3, Plotagon, and a microphone or headphones.

Fig. 6 shows that the researcher's smartphone's built-in voice recorder app was used for audio recording and a laptop was used for editing. Researchers employed a microphone to improve the audio quality. Each scenario's audio was recorded separately, with each scene lasting no more than 20s. This development was done using simple tools so that others could follow suit to develop it without high costs but produce high-quality products.

Fig. 6. Developer's voice-over process.

After the product has been developed, it is assessed by media and material experts. Learning media in the form of educational films based on Lampung local wisdom and material scripts have been submitted to learning material experts. There are ten indicator assessment items in the material expert validation procedure, namely: 1) The material presented is consistent with the core competencies and basic competencies; 2) The material offered is thorough and clear; 3) The concepts stated are brief and simple to understand; 4) The relevance of local wisdom material to the study subject; 5) The relevance of local wisdom material to the research objectives; 6) The subject supplied is appropriate for the student level; 7) The writing of the material is orderly, interesting, and interesting and the wording of the content is orderly, fascinating, and not excessive; 8) The use of colors to identify the discussion material; 9) The compatibility of the image with the topic; and 10) May make the lesson simpler to grasp.

The two material experts were selected because they had no friendship or family relationship with the researcher to avoid subjectivity. The material expert validation instrument was a questionnaire with a value scale format of 4, 3, 2, 1, and a comment column. It was intended to produce quantitative and qualitative data that can be presented descriptively. The results of the material expert validation are as Table I:

TABLE I: MATERIAL EXPERT VALIDATION RESULT

Validator	Score		Percentage
	Maximum	Result	
I	40	38	95%
II	40	36	90%
Total	80	74	92.5%

The validation results from subject matter experts obtained an average percentage of 92.5% from two expert validators, indicating that the content in Lampung Local Wisdom Film for Arabic Communication Skills is highly valid and suitable. However, there are some revisions suggested by the subject matter expert validator through comment sections as a way to improve the film media further. One of the recommended revisions by the subject matter expert is to include animated visuals for vocabulary (mufrodat) to enhance comprehension.

Furthermore, the media expert validation process was done by submitting Lampung's local wisdom film for Arabic communication skills. The media expert validation process had three assessment aspects: product attractiveness, product appearance, and product operation.

The two media expert validators had no friendship or family relationship with the researcher to avoid subjectivity. The material expert validation instrument was a questionnaire with a value scale format of 4, 3, 2, 1 and a comment column to produce quantitative and qualitative data that can be presented descriptively. The results of media expert validation are as Table II:

TABLE II: MEDIA EXPERT VALIDATION RESULT

Validator	Score		Percentage
	Maximum	Result	
I	100	88	88%
II	100	95	95%
Total	200	183	91.5%

The results of media expert validation obtained an average percentage of 91.5% from two expert validators, leading to the conclusion that the media in Lampung Local Wisdom Film for Arabic Communication Skills is highly suitable. However, there are some revisions suggested by the media expert validator through comment sections as a way to further improve the film media. The suggested revisions from the media expert include making the media more interactive by incorporating interactive evaluations and reducing the duration speed of the instructional film.

7) Implementation

The implementation stage was conducted on 20 eighth-grade students of Madrasah Tsanawiyah Maarif Keputran. This film can be accessed by students using laptops or Android devices. After watching the film, students were asked to fill out a questionnaire to find out the response to the usefulness of the film. Based on the results of the student response data shown in Fig. 7 that the average response is 84.5% in the highly useful category. However,

there were some suggestions from students through the comment column, namely that the Arabic text in the film should have been equipped with punctuation.
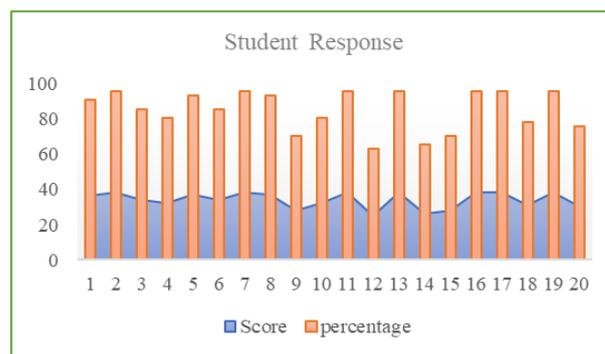
Fig. 7. The Diagram of students' responses.

8) Evaluation

Furthermore, the effectiveness of Lampung local wisdom film for Arabic communication skills was measured through pre-test and post-tests with a scoring scale of 4, 3, 2, 1. Data from the pre-test and post-test were analyzed using paired sample t-test. Before the t-test analysis, pre-requisite tests were conducted, namely the normality and homogeneity tests.

Based on the test results, the average pre-test score (initial test) in Fig. 8 was 48, and the average post-test score (final test) was 87, with a student progress score of 39. The average initial score before using Lampung local wisdom-based educational film differed from the average final score after using the developed media.
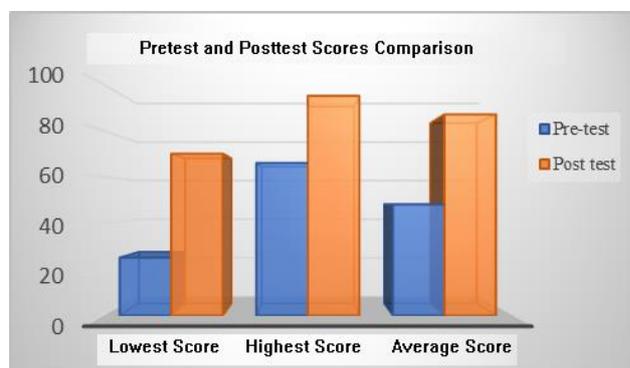
Fig. 8. The pre-test and post-test score comparison.

9) Data normality test results

The normality testing technique used was the Lilifors test, with the statistical hypothesis underlying the normality test was:

H_0: Data is normally distributed.
H_1: Data is not normally distributed.

Based on the results of the calculations on Table III, it can be seen that $L_{observed}$ is lower than $L_{critical}$ (0.15<0.19) at a significant level of 0.05. It means the null hypothesis is accepted. Therefore, the pre-test data is normally distributed.

TABLE III: THE PRE-TEST AND POST-TEST NORMALITY DATA

	Mean	Observed	df	Standard Deviation	$L_{observed}$	$L_{critical}$	Description
Pre-test	48	20	19	7.68	0.15	0.19	Normal
Post-test	87	20	19	6.77	0.12	0.19	Normal

Based on the results of the calculations on Table III, it can

be seen that $L_{observed}$ is lower than $L_{critical}$ (0.12<0.19) at a significant level of 0.05. It means the null hypothesis is accepted. Therefore, the post-test data is normally distributed.

10) Homogeneity test result

The Homogeneity test performed was the F-test with the formula used as follows:

$$F = \frac{S_{max}}{S_{min}}$$
$$df1 = (n1 - 1)$$
$$df2 = (n2 - 1)$$

The statistical hypothesis underlying homogeneity testing is:

H_0 = Data is homogeneity distributed If $F_{observed} < F_{critical}$, then the data variance is homogeneous.

H_1 = Data is not homogeneity distributed If $F_{observed} > F_{critical}$, then the variance is not homogeneous.

TABLE IV: THE PRE-TEST AND POST-TEST HOMOGENEITY DATA

Pre-test variance	Post-test variance	$F_{observed}$	$F_{critical}$
58.95	45.79	1.29	2.17

Based on Table IV, the value of $F_{observed}$ is 1.29, and the value of $F_{critical}$ is 2.17. Because $F_{observed}$ is lower than $F_{critical}$, the post-test and pre-test data are homogeneous.

11) Effectiveness test

The analysis of the effectiveness of Lampung local wisdom film was calculated through paired sample t-test with the following statistical hypotheses:

H_0 = data is rejected if $t_{observed} \leq t_{critical}$
H_1 = data is accepted if $t_{observed} > t_{critical}$
The finding of the t-test is as follows:

TABLE V: T-TEST RESULTS

	Pre-Test	Post Test
Mean	48	87
Variance	58.95	45.79
Observations	20	20
Pearson Correlation		0.94
Hypothesized Mean Difference		0
df		19
$t_{observed}$		66.678
P(T≤t) one-tail		2.7
$t_{Critical\ one-tail}$		1.73
P(T≤t) two-tail		5.4
$t_{Critical\ two-tail}$		2.093

Based on Table V, the value of $t_{observed}$ is greater than the $t_{critical}$ with a value of 66.678 > 2.093. This result shows that H_0 is rejected and H_1 is accepted. Therefore, it can be stated that Lampung's local wisdom film effectively teaches Arabic communication skills.

B. Discussion

Students can benefit from local wisdom-based learning, including social growth, skills development, and cultural and environmental values [29]. Local wisdom-based learning can aid students in social development since it involves collaboration and interaction between students and others around them who are connected to the local knowledge. Students can feel more connected to their local identity and feel prouder of their culture and tradition [33, 34]. The elements of local wisdom can provide contextualized student learning experiences [30, 31]. It helps students understand how learning can be applied in their daily lives so that learning becomes more meaningful and relevant in connecting theory with practice in everyday life [32]. In local wisdom-based learning, students learn practical skills that can be applied in everyday life, such as technology, leadership, presentation, and time management skills [29, 32, 34, 73–75].

In this development, researchers integrated Lampung's local wisdom into learning so that students can gain learning experiences by looking at Lampung's environment, traditions, and culture. The integration is by displaying the *Nyeruit* tradition as one of the symbols of togetherness of the Lampung people. Lampung people do Nyeruit by eating together using Lampung special sauce and eating it directly using their hands without spoons. Therefore, students know the traditions of Lampung, which must be preserved and even introduced to others. Also, the students are better prepared to face challenges in the future and become skilled and experienced members of society in solving life problems [76].

Local wisdom-based learning can be integrated into Arabic language learning. The integration of local wisdom learning in Arabic communication skills can be done by linking learning materials with local culture or traditions in the community. By applying local wisdom in Arabic Communication skills, students can better understand Arabic as a language that lives and develops in their environment. It can help students understand and apply Arabic more easily and effectively in everyday life [45]. One form of learning Arabic communication skills based on local wisdom is developing an educational film based on Lampung's local wisdom.

Educational films are media created by drawing or modeling images in sequence, creating the illusion of movement [77]. Educational films are typically created for entertainment but can also be used for educational purposes [78]. Previous research has shown that students can utilize instructional films both in the classroom with a teacher and independently, wherever and whenever [18, 24]. Furthermore, other studies have indicated that films are capable of enhancing comprehensive thinking and integrating theory with practice [34], as well as increasing one's interest and understanding in information seeking [35–38]. However, in previous research, the films did not include stories about contextual material, thus only able to enhance reading motivation, behavior change, and understanding of animation principles.

Educational films based on Lampung local wisdom were created by incorporating the values of local wisdom and culture in the Lampung region to help students learn Arabic more effectively and easily to be applied in everyday life. The content in the developed film contains tourist destinations in Lampung that are beautiful and not widely known by many people. One of the sites in this film is Pahawang Beach. It is one of the most beautiful and clean beaches in Lampung. Therefore, the researchers want to explore this potential so that students understand more and feel pride in their region. In addition to gaining knowledge and a sense of pride,

students also find it easier to apply Arabic communication skills because the content relates to their surrounding environment. By utilizing film, students can learn independently and actively without space and time limitations so that their interest in learning can be greater [18, 21, 27, 28, 79].

However, there are some drawbacks to using educational films, such as relatively high production costs and a lack of flexibility in adapting film content to different learning needs and conditions, erratic and unfocused behavior during learning, delaying learning at will, and interaction with others [19, 61].

Local wisdom-based educational films improve student motivation, learning outcomes, and self-identity [57–60]. Integration is one method for addressing existing flaws. Learning based on local wisdom substantially impacts conceptual knowledge, environmental literacy, and the development of student's critical thinking skills [80, 81]. In a broader learning context, integrating educational films with local wisdom can also help students appreciate the cultural variety and respect one another [43, 44]. As a result, integrating educational films with local wisdom in learning can be a significant step toward increasing the effectiveness and relevance of learning while also contributing to creating a more inclusive and student-centered learning environment.

The abundance of advantages that films offer in integrating local wisdom into learning can make the learning process more engaging and enjoyable. However, the development of instructional media still has its drawbacks, as demonstrated in Wang's study, which suggests that instructional films are ineffective in enhancing understanding of challenging learning topics when played without an instructor [30]. Kim stated that the use of films in learning shows that 45.2% of students are unable to focus on studying, while 32.8% complain about the complexity of the equipment required for online classes [19].

To address this issue, the researchers developed the Lampung Local Wisdom Film for Arabic Communication Skills, which is accompanied by Arabic text to aid auditory comprehension. The developed film is designed to facilitate students in mastering Arabic communication skills by incorporating social, cultural, and environmental aspects specific to the Lampung region. The aim is not only to enhance students' proficiency in Arabic communication skills but also to enable them to showcase the social, cultural, and diverse aspects of Lampung's culture and tourism to foreign tourists, particularly those from Arab countries.

V. CONCLUSION

The analysis concluded that the Lampung local wisdom film for Arabic communication skills developed with the ADDIE model produces a learning media that is interesting, fun, and effective in overcoming the difficulties of Arabic communication skills. This educational film is given a touch of social, cultural, and environmental conditions in Lampung so that students are proficient in Arabic communication skills and demonstrate the diversity of Lampung culture and tourism to foreign tourists using Arabic.

The results of the feasibility test of the film by media and material expert validators are considered highly feasible, indicating that the product can be used in learning. This film

effectively teaches Arabic communication skills, as evidenced by the test results obtained by the average pre-test score of 48 and the average post-test score of 87, with a progress value of 39. The finding is reinforced by the results of the t-test, namely $t_{observed}$ of 66.678, which is higher than $t_{critical}$ of 2.093. The score further showcases the film's effectiveness in improving Arabic communication skills and learning outcomes.

The researchers recommend that the Lampung local wisdom film can be used for Arabic language learning for Madrasah Tsanawiyah students. Arabic language learning using Lampung local wisdom film media can make students active even though the movie is played repeatedly. Teachers are also consistent in conducting interactive evaluations after students watch the film.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Koderi conceptualized the study, processed, analyzed, interpreted data, and wrote the paper. Muhammad Sufian designed and developed the Lampung Local Wisdom Film for Arabic Communication Skills. Erlina helped in the data gathering and analysis. All authors had approved the final version.

REFERENCES

[1] A. W. Ritonga, A. Desrani, Y. Rubiyantoro, and U. Kingdom, "Arabic learning design based on 21," *Izdihar J. Arab. Lang. Teaching, Linguist. Lit.*, vol. 7, no. 2, pp. 1–14, 2022.

[2] W. Wargadinata, I. Maimunah, S. R. Febriani, and L. Humaira, "Mediated arabic language learning for higher education in COVID-19 situation," *Izdihar J. Arab. Lang. Teaching, Linguist. Lit.*, vol. 3, no. 1, pp. 59–78, 2020, doi: 10.22219/jiz.v3i1.11862

[3] T. M. Asri, D. K. Irmawati, and D. N. Dewi, "Investigating the use of internet applications for teaching at higher educational level in the Indonesian context," *Arab World English J.*, vol. 11, no. 2, pp. 37–48, 2020, doi: 10.24093/awej/vol11no2.3

[4] S. Geng, K. M. Y. Law, and B. Niu, "Investigating self-directed learning and technology readiness in blending learning environment," *Int. J. Educ. Technol. High. Educ.*, vol. 16, no. 1, 2019, doi: 10.1186/s41239-019-0147-0

[5] M. T. Hebebci, Y. Bertiz, and S. Alan, "Investigation of views of students and teachers on distance education practices during the coronavirus (COVID-19) pandemic," *Int. J. Technol. Educ. Sci.*, vol. 4, no. 4, pp. 267–282, 2020, doi: 10.46328/ijtes.v4i4.113

[6] Y. D. Puspitarini and M. Hanif, "Using learning media to increase learning motivation in elementary school," *Anatol. J. Educ.*, vol. 4, no. 2, pp. 53–60, 2019, doi: 10.29333/aje.2019.426a

[7] Zurqoni, H. Retnawati, S. Rahmatullah, H. Djidu, and E. Apino, "Has arabic language learning been successfully implemented?" *Int. J. Instr.*, vol. 13, no. 4, pp. 715–730, 2020, doi: 10.29333/iji.2020.13444a

[8] A. Amrina, I. M. Iswantir M, A. Mudinillah, and A. F. Noor, "The contribution of arabic learning to improve religious materials for students," *Ijaz Arab. J. Arab. Learn.*, vol. 5, no. 1, pp. 192–200, 2022, doi: 10.18860/ijazarabi.v5i1.15066

[9] M. Jailani, "Development of arabic learning media innovation from neuroscience perspective for santri: Implications in the development of intellectual property rights in islamic boarding schools," *Al-Ta lim J.*, vol. 29, no. 2, pp. 150–163, 2022.

[10] K. Koderi, M. Aridan, and A. B. Muslim, "Pengembangan mobile learning untuk penguasaan mufrodat siswa MTs," *Arab. J. Bhs. Arab*, vol. 4, no. 2, p. 265, 2020, doi: 10.29240/jba.v4i2.1769

[11] K. Kholisin, B. F. Nisa', F. K. Anam, and M. F. Fauzi, "Developing hiwaruna as arabic conversation book for speaking skills in Islamsic boarding school," *Izdihar J. Arab. Lang. Teaching, Linguist. Lit.*, vol. 5, no. 2, pp. 209–224, 2022, doi: 10.22219/jiz.v5i2.22935

[12] A. W. Ritonga, W. Wargadinata, M. Ritonga, and S. R. Febriani, "Teaching maharah kalam on the basis of Culture using the textbook 'al-'Arabiyyah Baina Yadaik' at the middle school/Ta'lim Maharah al-Kalam 'Ala Asas al-Tsaqafah bi Istikhdam Kitab al-'Arabiyyah Bayna Yadayk fi Marhalah al-Mutawassithah," *Arab. J. Bhs. Arab*, vol. 5, no. 1, p. 1, 2021, doi: 10.29240/jba.v5i1.1942

[13] N. Hidayah, N. A. Ridwan, H. Mahliatussikah, M. W. Dariyadi, and B. Bekhoula, "Akuarintar as a media in arabic teaching and learning for deaf towards sustainable development goals (SDGS) 2030," *Izdihar J. Arab. Lang. Teaching, Linguist. Lit.*, vol. 3, no. 3, pp. 181–196, 2020, doi: 10.22219/jiz.v3i3.13921

[14] D. Kim and M. Li, "Digital storytelling: Facilitating learning and identity development," *J. Comput. Educ.*, vol. 8, no. 1, pp. 33–61, 2021, doi: 10.1007/s40692-020-00170-9

[15] U. M. S. Subiyantoro, Umar, and M. Salehudin, "Development of e-learning oriented inquiry learning based on character education in multimedia course," *Eur. J. Educ. Res.*, vol. 9, no. 4, pp. 1591–1603, 2020, doi: 10.12973/eu-jer.9.4.1591

[16] M. Mellisa and Y. D. Yanda, "Developing audio-visual learning media based on video documentary on tissue culture explant of Dendrobium bigibbum," *JPBI (Jurnal Pendidik. Biol. Indones.*, vol. 5, no. 3, pp. 379–386, 2019, doi: 10.22219/jpbi.v5i3.9993

[17] T. Lauc, "Effects of multimedia instructional message on motivation and academic performance of elementary school students in Croatia," *Int. J. Instr.*, vol. 13, no. 4, pp. 491–508, 2020.

[18] K. Koderi, S. Latifah, J. Fakhri, A. Fauzan, and Y. P. Sari, "Developing electronic student worksheet using 3d professional pageflip based on scientific literacy on sound wave material," *J. Phys. Conf. Ser.*, vol. 1467, no. 1, 2020, doi: 10.1088/1742-6596/1467/1/012043

[19] J. Oh, S. J. Kim, S. Kim, K. A. Kang, J. S. Kan, and R. Bartlett, "Development and evaluation of flipped learning using film clips within a nursing informatics course," *Japan J. Nurs. Sci.*, vol. 16, no. 4, pp. 385–395, 2019, doi: 10.1111/jjns.12245.

[20] S. H. Arveklev, L. Berg, H. Wigert, M. Morrison-Helme, and M. Lepp, "Nursing students experiences of learning about nursing through drama," *Nurse Educ. Pract.*, vol. 28, pp. 60–65, 2018, doi: 10.1016/j.nepr.2017.09.007

[21] S. Fayanto, R. Herawati, and D. Sulisworo, "The development of learning videos on powtoon-based work and energy topics to support flipped classroom learning," *IOSR J. Res. Method Educ.*, vol. 9, no. 4, pp. 51–58, 2019, doi: 10.9790/1959-0904015158

[22] A. H. Prasetyo, P. A. Saga, T. Mokodongan, and D. Turgarini, "Preservation of traditional and local foods of blora regency as a gastronomic tourist attraction," *J. Gastron. Tour.*, vol. 9, no. 2, pp. 68–81, 2022, doi: 10.17509/gastur.v9i2.52213

[23] W. S. Tse, L. Y. A. Choi, and W. S. Tang, "Effects of video-based flipped class instruction on subject reading motivation," *Br. J. Educ. Technol.*, vol. 50, no. 1, pp. 385–398, 2019, doi: 10.1111/bjet.12569

[24] S. Pambudi, I. Hidayatulloh, H. D. Surjono, and T. Sukardiyono, "Development of instructional videos for the principles of 3d computer animation," *J. Phys. Conf. Ser.*, vol. 1737, no. 1, 2021, doi: 10.1088/1742-6596/1737/1/012022

[25] R. W. Daryono, S. Rochmadi, and N. Hidayat, "Development and validation of video-based learning media to increase competency achievement in civil engineering education," *J. Phys. Conf. Ser.*, vol. 1833, no. 1, 2021, doi: 10.1088/1742-6596/1833/1/012022

[26] Hasmalena *et al.*, "Pengembangan media video animasi 2D materi regulasi diri untuk masa transisi ke SD," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 7, no. 1, pp. 637–646, 2023, doi: 10.31004/obsesi.v7i1.3632

[27] M. B. Luthfi, S. Rochmadi, R. W. Daryono, and R. P. S. Saputra, "The development of interactive media based on video animation in the use of a total station for measurement stake out the building," *Budapest Int. Res. Critics Linguist. Educ. J.*, vol. 3, no. 4, pp. 1773–1781, 2020, doi: 10.33258/birle.v3i4.1345

[28] S. Jumini, S. Madnasri, E. Cahyono, and P. Parmin, "Article review: Integration of science, technology, entrepreneurship in learning science through bibliometric analysis," *J. Turkish Sci. Educ.*, vol. 19, no. 4, pp. 1237–1253, 2022, doi: 10.36681/tused.2022.172

[29] Bulkani, M. Fatchurahman, H. Adella, and M. A. Setiawan, "Development of animation learning media based on local wisdom to improve student learning outcomes in elementary schools," *Int. J. Instr.*, vol. 15, no. 1, pp. 55–72, 2022, doi: 10.29333/iji.2022.1514a

[30] R. F. Zahrah and W. D. Febriani, "A contextual problem based of local wisdom improve the ability to solving a word problem mathematics students of elementary school," *PrimaryEdu - J. Prim. Educ.*, vol. 4, no. 1, p. 55, 2020, doi: 10.22460/pej.v4i1.1492

[31] E. Napitupulu, H. Tambunan, and N. Sebayang, "Development of textbooks based on local wisdom for character building of elementary education students," *Int. J. Adv. Eng. Manag. Sci.*, vol. 7, no. 1, pp. 27–33, 2021, doi: 10.22161/ijaems.71.5

[32] L. Latri *et al.*, "Development of social science textbooks integrated with islamic and local culture values," *J. Educ. Sci. Technol.*, vol. 8, no. 3, p. 188, 2022, doi: 10.26858/est.v8i2.38693

[33] A. Tohri, A. Rasyad, M. Sururuddin, and L. M. Istiqlal, "The urgency of Sasak local wisdom-based character education for elementary school in East Lombok, Indonesia," *Int. J. Eval. Res. Educ.*, vol. 11, no. 1, pp. 333–344, 2022, doi: 10.11591/ijere.v11i1.21869

[34] H. Hidayati, A. Arifuddin, A. Aflina, and Z. Mz, "Local wisdom in coffee café in medan: Anthropolinguistic approach," *Lang. Lit. J. Linguist. Lit. Lang. Teach.*, vol. 4, no. 1, pp. 112–120, 2020, doi: 10.30743/ll.v4i1.2441

[35] S. S. Sabbah, F. Hallabieh, and O. Hussein, "Communication Skills among Undergraduate Students at Al-Quds University," *World J. Educ.*, vol. 10, no. 6, p. 136, 2020, doi: 10.5430/wje.v10n6p136

[36] Z. H. Iksan *et al.*, "Communication skills among university students," *Procedia - Soc. Behav. Sci.*, vol. 59, pp. 71–76, 2012, doi: 10.1016/j.sbspro.2012.09.247.

[37] S. R. Hikamah, Suhadi, F. Rohman, and N. Kurniawan, "Developing virtual communication skills in online learning based on modified PBL during the COVID-19 pandemic," *Int. J. Educ. Pract.*, vol. 9, no. 2, pp. 323–339, 2021, doi: 10.18488/journal.61.2021.92.323.339.

[38] M. Kiliç "Vocabulary knowledge as a predictor of performance in writing and speaking: A case of turkish efl learners," *Pasaa*, vol. 57, no. June, pp. 133–164, 2019.

[39] L. He and Q. Luo, "Developing Thai speaking skills of Chinese students using vocabulary learning strategies," *Int. J. Instr.*, vol. 16, no. 1, pp. 983–998, 2023, doi: 10.5926/jjep.60.92.

[40] A. Fadli and Irwanto, "The effect of local wisdom-based ELSII learning model on the problem solving and communication skills of pre-service islamic teachers," *Int. J. Instr.*, vol. 13, no. 1, pp. 731–746, 2020, doi: 10.29333/iji.2020.13147a.

[41] J. K. M. Ali, M. A. Shamsan, R. Guduru, and N. Yemmela, "Attitudes of Saudi EFL learners towards speaking skills," *Arab World English J.*, vol. 10, no. 2, pp. 253–364, 2019, doi: 10.24093/awej/vol10no2.27.

[42] R. E. Simamora, S. Saragih, and H. Hasratuddin, "Improving students' mathematical problem solving ability and self-efficacy through guided discovery learning in local culture context," *Int. Electron. J. Math. Educ.*, vol. 14, no. 1, pp. 61–72, 2019, doi: 10.12973/iejme/3966.

[43] S. Hastuti, Slamet, Sumarwati, and A. Rakhmawati, "Short story writing learning based on local wisdom with digital book media for university students," *Int. J. Instr.*, vol. 16, no. 1, pp. 821–832, 2023, doi: 10.29333/iji.2023.16146a.

[44] M. Ismail and R. Winarni, "Development of theater education textbook with character education and local wisdom through active learning to improve the students' script writing ability," *VNU J. Sci. Educ. Res.*, vol. 35, no. 3, pp. 1–12, 2019, doi: 10.25073/2588-1159/vnuer.4205.

[45] A. Dwianto, I. Wilujeng, Z. K. Prasetyo, and I. G. P. Suryadarma, "The development of science domain based learning tool which is integrated with local wisdom to improve science process skill and scientific attitude," *J. Pendidik. IPA Indones.*, vol. 6, no. 1, pp. 23–31, 2017, doi: 10.15294/jpii.v6i1.7205.

[46] E. Andriana, A. Syachruroji, T. P. Alamsyah, and F. Sumirat, "Natural science big book with baduy local wisdom base media development for elementary school," *J. Pendidik. IPA Indones.*, vol. 6, no. 1, pp. 76–80, 2017, doi: 10.15294/jpii.v6i1.8674.

[47] D. A. M. M. O. Priantini, "The development of teaching video media based on tri kaya parisudha in educational psychology courses," *J. Educ. Technol.*, vol. 4, no. 4, p. 448, 2021, doi: 10.23887/jet.v4i4.29608.

[48] J. Goodwin *et al.*, "The use of film-based interventions in adolescent mental health education: A systematic review," *J. Psychiatr. Res.*, vol. 137, no. February, pp. 158–172, 2021, doi: 10.1016/j.jpsychires.2021.02.055.

[49] M. U. Sreeja and B. C. Kovoor, "Towards genre-specific frameworks for video summarisation: A survey," *J. Vis. Commun. Image Represent.*, vol. 62, pp. 340–358, 2019, doi: 10.1016/j.jvcir.2019.06.004.

[50] N. J. Cronin, T. Rantalainen, J. P. Ahtiainen, E. Hynynen, and B. Waller, "Markerless 2D kinematic analysis of underwater running: A deep learning approach," *J. Biomech.*, vol. 87, pp. 75–82, 2019, doi: 10.1016/j.jbiomech.2019.02.021.

[51] R. K. S. Ambwani and A. K. Misra, "Prucalopride: A recently approved drug by the food and drug administration for chronic idiopathic constipation," *Int. J. Appl. Basic Med. Res.*, vol. 2019, no. November, pp. 193–195, 2017, doi: 10.4103/ijabmr.IJABMR.

[52] L. Mishra, T. Gupta, and A. Shree, "Online teaching-learning in higher education during lockdown period of COVID-19 pandemic," *Int. J. Educ. Res. Open*, vol. 1, no. June, p. 100012, 2020, doi: 10.1016/j.ijedro.2020.100012.

[53] S. F. Costa, "Assessing the use of a video to teach the laplace expansion theorem in higher education," *Int. J. Inf. Educ. Technol.*, vol. 12, no. 3, pp. 185–193, 2022, doi: 10.18178/ijiet.2022.12.3.1603.

[54] D. Blacer-Bacolod, "Student-generated videos using green screen technology in a biology class," *Int. J. Inf. Educ. Technol.*, vol. 12, no. 4, pp. 339–345, 2022, doi: 10.18178/ijiet.2022.12.4.1624.

[55] N. K. D. Muliani and I. M. C. Wibawa, "Pengaruh model pembelajaran inkuiri terbimbing berbantuan video terhadap hasil belajar IPA," *J. Ilm. Sekol. Dasar*, vol. 3, no. 1, p. 107, 2019, doi: 10.23887/jisd.v3i1.17664.

[56] D. Yuniarni, R. P. Sari, and A. Atiq, "Pengembangan multimedia interaktif video senam animasi berbasis budaya khas kalimantan barat," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 4, no. 1, p. 290, 2019, doi: 10.31004/obsesi.v4i1.331.

[57] M. Hanif, "The development and effectiveness of motion graphic animation videos to improve primary school students' sciences learning outcomes," *Int. J. Instr.*, vol. 13, no. 4, pp. 247–266, 2020, doi: 10.29333/iji.2020.13416a.

[58] Z. Yu, "The effects of gender, educational level, and personality on online learning outcomes during the COVID-19 pandemic," *Int. J. Educ. Technol. High. Educ.*, vol. 18, no. 1, 2021, doi: 10.1186/s41239-021-00252-3.

[59] M. U. Sattar, S. Palaniappan, A. Lokman, A. Hassan, N. Shah, and Z. Riaz, "Effects of virtual reality training on medical students' learning motivation and competency," *Pakistan J. Med. Sci.*, vol. 35, no. 3, pp. 852–857, 2019, doi: 10.12669/pjms.35.3.44.

[60] C. M. Wang, J. H. Ye, and J. N. Ye, "Hands-on making leather goods: Learning from youtube videos," *Int. J. Inf. Educ. Technol.*, vol. 11, no. 6, pp. 269–276, 2021, doi: 10.18178/ijiet.2021.11.6.1522.

[61] J. Jeevahan and M. Chandrasekaran, "Nanoedible films for food packaging: a review," *J. Mater. Sci.*, vol. 54, no. 19, pp. 12290–12318, 2019, doi: 10.1007/s10853-019-03742-y.

[62] Z. Hua, "How to design and apply interactive digital educational TV programs based on the ADDIE model," *Int. J. Inf. Educ. Technol.*, vol. 6, no. 11, pp. 884–889, 2016, doi: 10.7763/ijiet.2016.v6.810.

[63] H. Wiphasith, R. Narumol, and C. Sumalee, "The design of the contents of an e-learning for teaching M.5 English language using ADDIE model," *Int. J. Inf. Educ. Technol.*, vol. 6, no. 2, pp. 127–131, 2016, doi: 10.7763/ijiet.2016.v6.671.

[64] J. N. Nabayra, "Teacher-made videos as learning tool in elementary statistics during the pandemic: A developmental research," *Int. J. Inf. Educ. Technol.*, vol. 13, no. 1, pp. 10–18, 2023, doi: 10.18178/ijiet.2023.13.1.1774.

[65] Zetriuslita, Nofriyandi, and E. Istikomah, "The increasing self-efficacy and self-regulated through GeoGebra based teaching reviewed from Initial Mathematical Ability (IMA) LEVEL," *Int. J. Instr.*, vol. 14, no. 1, pp. 587–598, 2020, doi: 10.29333/IJI.2021.14135A.

[66] G. Lacerda, F. Petrillo, M. Pimenta, and Y. G. Guéhéneuc, "Code smells and refactoring: A tertiary systematic review of challenges and observations," *J. Syst. Softw.*, vol. 167, 2020, doi: 10.1016/j.jss.2020.110610.

[67] S. Dodds and A. C. Hess, "Adapting research methodology during COVID-19: lessons for transformative service research," *J. Serv. Manag.*, vol. 32, no. 2, pp. 203–217, 2021, doi: 10.1108/JOSM-05-2020-0153.

[68] C. I. de Campos, C. S. Pitombo, P. Delhomme, and J. A. Quintanilha, "Comparative analysis of data reduction techniques for questionnaire validation using self-reported driver behaviors," *J. Safety Res.*, vol. 73, pp. 133–142, 2020, doi: 10.1016/j.jsr.2020.02.004.

[69] A. Cahyani and K. Kholisin, "Developing ArVo: Augmented reality-based application to improve arabic vocabulary mastery," *Arab. J. Bhs. Arab*, vol. 6, no. 2, p. 465, 2022, doi: 10.29240/jba.v6i2.4798

[70] U. C. Zahro, S. R. Amalia, and N. F. Amin, "The effectiveness of direct method in arabic language learning," *J. Al Bayan J. Jur. Pendidik. Bhs. Arab*, vol. 14, no. 1, pp. 40–57, 2022, doi: 10.24042/albayan.v

[71] Y. Y. Cloudia Ho, "Communicative language teaching and English as a foreign language undergraduates' communicative competence in tourism English," *J. Hosp. Leis. Sport Tour. Educ.*, vol. 27, no. 1, p. 100271, 2020, doi: 10.1016/j.jhlste.2020.100271

[72] Setiyani, D. P. Putri, F. Ferdianto, and S. H. Fauji, "Designing a digital teaching module based on mathematical communication in relation and function," *J. Math. Educ.*, vol. 11, no. 2, pp. 223–236, 2020, doi: 10.22342/jme.11.2.7320.223-236

[73] H. Darmadi, "Educational management based on local wisdom (descriptive analytical studies of culture of local wisdom in west kalimantan)," *JETL (Journal Educ. Teach. Learn.*, vol. 3, no. 1, p. 135, 2018, doi: 10.26737/jetl.v3i1.603

[74] A. Irawatie, I. Iswahyuni, and M. E. Setyawati. (2019). Education learning development of character education-based state defense. *Int. J. Multicult. Multireligious Underst.* [Online]. 6(2). pp. 27–42. Available: https://ijmmu.com/index.php/ijmmu/article/view/602

[75] S. Sugiantoro, J. Widodo, M. Masrukhi, and A. S. Priyanto, "Integrating the value of local wisdom of the Sidoarjo community into social studies learning in junior high schools in Sidoarjo Regency, East Java, Indonesia," *Kasetsart J. Soc. Sci.*, vol. 43, no. 4, pp. 815–824, 2022, doi: 10.34044/j.kjss.2022.43.4.03

[76] B. B. Jensen and K. Schnack, "The action competence approach in environmental education," *Environ. Educ. Res.*, vol. 3, no. 2, pp. 163–178, 2017, doi: 10.1080/1350462970030205

[77] A. S. Hapsari, M. Hanif, Gunarhadi, and Roemintoyo, "Motion graphic animation videos to improve the learning outcomes of elementary school students," *Eur. J. Educ. Res.*, vol. 8, no. 4, pp. 1245–1255, 2019, doi: 10.12973/eu-jer.8.4.1245

[78] M. Hamalosmanoğlu, E. Kızılay, and A. S. Kırmızıgül, "The effects of using animated films in the environmental education course on prospective teachers' behavior towards environmental problems and their attitude towards solid waste and recycling," *Int. Online J. Educ. Teach.*, vol. 7, no. 3, pp. 1178–1187, 2020.

[79] Y. T. A. Ningtiyas and Y. Anistyasari (2020). Studi literatur: Pengaruh Penggunaan video sebagai media pembelajaran Di Perguruan Tinggi. *J. IT-EDU.* [Online]. 5(1). pp. 417–424. Available: https://ejournal.unesa.ac.id/index.php/it-edu/article/view/40725

[80] S. P. W. Lubis, I. G. P. Suryadarma, Paidi, and B. E. Yanto, "The effectiveness of problem-based learning with local wisdom oriented to socio-scientific issues," *Int. J. Instr.*, vol. 15, no. 2, pp. 455–472, 2022, doi: 10.29333/iji.2022.15225a

[81] Y. Arti and J. Ikhsan, "The profile of junior high school students' critical thinking skills and concept mastery level in local wisdom based on outdoor learning," *J. Phys. Conf. Ser.*, vol. 1440, no. 1, 2020, doi: 10.1088/1742-6596/1440/1/012105