Digital Teaching Materials of Logical Thinking-Oriented Exposition Text for X Graders of SMA/MA/SMK

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Abstract. This research aims to develop a logical thinking-oriented exposition digital teaching material product that is feasible and effective for Indonesian Language learning in grade X students of SMA/MA/SMK. This research uses a research and development method (Research and Development) with the ADDIE (Analysis Design Development Implementation Evaluation) model. Data collection in the study was carried out and analyzed descriptively, both quantitative and qualitative. The result of the design and development of this digital teaching material is a digital module in the form of pdf and a Flipbook consisting of a cover, concept map, learning objectives, until author biodata. It also contains materials in videos to practice listening, reading and writing that can be accessed in youtube by scanning the link. The results of product validation by language, material and media validators and practitioners stated that the digital teaching materials of logical thinking-oriented exposition texts for SMA/MA/SMK with a result of 80.79% mean "Feasible" to use. The results of the implementation of digital teaching materials for logical thinking-oriented exposition texts for 63 grade X students at SMAN 1 Gantar, SMAN 1 Gantar and MA Ma'had al-Zaytun, showed that there was a significant development between student learning outcomes before and after the use of digital teaching materials after being assessed using the T-Test (Paired sample Test), meaning "effective" for learning exposition text materials. Thus, digital teaching materials for logical thinking-oriented exposition texts for teachers and students of class X SMA/MA/SMK are feasible and effective in learning.

Keywords: Digital Teaching Materials, Exposition Text, Logical thinking oriented

I. INTRODUCTION

The Covid 19 pandemic has had a great impact on education in Indonesia. Research shows that this pandemic has caused a significant loss of literacy and numeracy learning. As part of learning loss mitigation, schools can choose to use a simplified curriculum so that they can focus on strengthening character and basic competencies. There are three options for the curriculum of the education unit (Kepmendikbud No. 719/P/2020: 21 in Hartati 2020), namely: 1. Full use of the 2013 curriculum (59.2% of users). 2. Utilizing emergency courses (simple courses of the Ministry of Education and Culture in 2013) (31.5% of users). 3. Simplifying the curriculum independently (8.9% of users). It turned out that students who used the emergency curriculum achieved better results than those who used the full 2013 curriculum, regardless of socioeconomic background, according to a survey of 18,370 students in Indonesia. Qualitative data confirms that teachers feel helped by reviewing basic materials so that they can better design and implement learning. The Literacy-Numeracy Module of the Ministry of Education and Culture, Research and Technology is also often touted as a useful tool in the implementation of the curriculum. The study recovery period is from 2022 to 2024. A prototype curriculum is offered as an additional option for educational units to carry out learning recovery

Prototype Curriculum as a common thread of previous curriculum development: 1). Holistic Orientation: The curriculum is designed for the holistic development of students, including the development of academic and non-academic skills, cognitive, social, emotional and mental skills. 2). Competency-based, not content-based: the curriculum is made based on the competencies that are to be developed, not specific content or materials. 3). Contextualization and personalization: the curriculum is designed according to the context (culture, schoolwork, local environment) and student needs. The prototype curriculum prioritizes learning according to students' abilities and provides a wider space for character and competency development, which has several basic characteristics that support learning recovery, namely: 1). Project-based learning of soft skills and character (beliefs); piety and noble morals).; mutual cooperation; global diversity; independence; critical reasoning; creativity). 2). Focus on important materials to allow enough time to learn basic skills such as reading and math thoroughly. 3). Flexibility of teachers in carrying out learning according to students' abilities (teaching at the right level) and making changes to the local context and content. In the prototype curriculum structure, 20-30% of the lesson hours are used for the development of the character of the Pancasila student profile through project-based learning. Project-based development is important for character development because: 1). Providing opportunities for experiential learning. 2). Integrate essential competencies learned by students from various disciplines. 3). Flexible learning structure. (Hartati : 2022)

Nowadays, the times have changed all aspects related to the economic, social, cultural, security and educational fields. The emergence of a new era, namely the millennial era, where the millennial generation is clearly affected by its development in the era of digitalization which is growing rapidly along with the development of technology and communication. Technology is realized by



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the existence of the internet which is big data in life in this industrial era. Therefore, the need for digital literacy in learning, namely that both teachers and students must understand and process all technology-based information critically. Digital literacy learning has the goal of combining cognitive and linguistic aspects, including the process of listening, speaking, reading and writing as well as the concept of analyzing written discourse using technology (Anarizka, V & Wilsa, J: 2023)

In this digital era, the need for teaching materials that are varied and can support school learning is urgently needed. Digital teaching materials that can motivate students in learning are very important. Digital teaching materials are teaching materials that integrate digital technology in their preparation so that they can be learned through digital devices such as smartphones, laptops and computers. (Mascita 2021: 393)

In general, teachers will use textbooks and teaching materials available at school. However, the existence of textbooks is considered insufficient to meet the demands of varied needs. For this reason, it is necessary to develop digital teaching materials that support students' understanding. Digital teaching materials developed based on e-books in the form of flipbooks make it easier for users, both teachers and students, to open them anywhere and anytime. So that students can practice more often and teachers get additional teaching materials that make it easier for them to access using PCs, computers or gadgets

The characteristics of the e-module digital teaching materials are very suitable for the digital native generation in this era. The digital native generation, "is used to the cognitive structure of jumping around, and is able to do several activities/work at the same time. For example, listening to music while reading, while still understanding what they are reading," Prensky 2016. This native generation is very proficient in using digital devices. Akcayir, et. Al, 2016

Digital teaching materials also support open learning, and students can have them. Because it is easy to share, such as through social media such as WhatsApp, Facebook, Telegram, and others. Let students really know what their basic abilities are, must be mastered in every application of learning. This is in line with 21st century learning skills.

Students can learn independently by using e-books that have been prepared by subject teachers. In addition, parents can also monitor the quality of lessons for their children. There are many types of electronic teaching materials, their functions include: (a) Alternative learning media; (b) as a differentiator from other teaching materials, electronic teaching materials contain multimedia content so that it is more interesting and more fun in learning; (c) as a medium for sharing information; (d) digital teaching materials can be disseminated more easily, both through media such as websites, virtual classes, emails, and other digital media. Waller (2013).

Digital teaching materials have the following advantages: They are much cheaper, practical, and easy to store. E-books have the advantage of being cheaper, practical, not limited by space, portable and environmentally friendly because they do not use paper. Advantages of electronic teaching materials Information can be displayed in the form of text or images that are interactive for students, and can be adjusted to the needs of students. Dooling, Pereira and Kuechler (2012)

An exposition text is a text that presents opinions or ideas seen from the author's point of view and serves to convince other parties that the arguments they convey are correct and based on facts. By better understanding exposition texts that have a problem text structure, arguments and reaffirmations, students often practice giving opinions that are proven by facts, indirectly students also practice stating something logically, (Kosasih 2015: 25), The logical process basically includes three steps, namely the formation of understanding, the formation of opinions, and the drawing of conclusions (Suryabrata, 2012: 54). As we all know, the forms of exposition are article texts, lectures, advertising texts, news texts, editorial texts. These forms of text are often encountered in our daily lives.

Persuasive text is built with the structure of 1) introduction of the issue, paragraphs containing the presentation of the problem to be discussed, 2). A series of arguments supported by a number of facts and opinions of the author, 3). A statement of invitation to the reader to do something as expected by the author in his writing, 4) restating what has been conveyed. (H Heriyati, S Kusmana, Y Gloriani: 2022)

Logical thinking ability is the ability to think to draw valid conclusions according to the rules of logic, including: the ability to think, the ability to argue, and draw conclusions. 1. The rule of logic is a rule or benchmark that needs to be considered to be able to think precisely, carefully and in an orderly manner so that the truth is obtained rationally. 2. Difficulty in thinking is that students can determine the steps that are taken regularly in solving the problems given from the beginning of planning to conclusions. 3. Argumentability is that students are able to provide arguments logically according to existing facts or information related to the steps of problem planning and problem solving. 4. Drawing conclusions is that students can draw conclusions from an existing problem based on the solution steps that have been taken. (Rumalili:2020)

The independent curriculum requires grade 12 students to write scientific essays. Because making a scientific essay is one of the graduation requirements. For this reason, the researcher in this case also choose to create digital teaching materials for logical thinking-oriented exposition text materials to train students to be able to practice from grade X to make non-fiction essays such as this logical thinking-oriented exposition text.

Therefore, the researcher developed a digital teaching material product for logical thinking-oriented exposition texts that are feasible and effective in learning Indonesian Language for students in grade X, SMA/MA/SMK.



II. METHOD

This research uses R&D research and development methods with the ADDIE (Analysis Design Development Implementation Evaluation) model. Sugiyono (2012: 404). This research was carried out in 3 schools, namely: SMK Negeri 1 Gantar, SMA Negeri 1 Gantar and MA Ma'had Al-Zaytun.

The steps of the designing digital material consist of: 1). Analysis of Curriculum and materials 2). Design of digital teaching materials, 3). Development of digital teaching materials, 4). Implementation of digital teaching material products, and 5). Evaluation of digital teaching material products.

Data collection in the study was carried out by distributing a questionnaire to analyze the needs of teaching materials to 15 Indonesian Language teachers, the results of which were used as the background for the design of this module. Providing student response questionnaires as additional data to evaluate this digital teaching material. This questionnaire was given after the students finished receiving the treatment (after Postes), while the observation results were carried out when students were tested using digital teaching materials of exposition texts. The questionnaire given to expert validators and practitioners was given to ass ess the feasibility of teaching materials for logical thinking-oriented exposition texts. Which consists of content eligibility, presentation feasibility, language feasibility and graphic feasibility. The Validation results are calculated using the formula:

$$P = \frac{\Sigma x}{\Sigma x^{i}} \times 100 \%$$

The students' learning outcomes on the application of this teaching material were carried out to obtain the results of research on whether this teaching material is effective for learning exposition text material for students in SMA/MA/SMK grades. The data obtained were analyzed in a descriptive way, both quantitative and qualitative, using the Likert scale and with a t-test assessment.

III. RESULTS AND DISCUSSION

A. Results

1]. In describing the results of the research, the researcher started by designing digital teaching materials for logical thinkin goriented exposition texts in answering the first problem formulation.

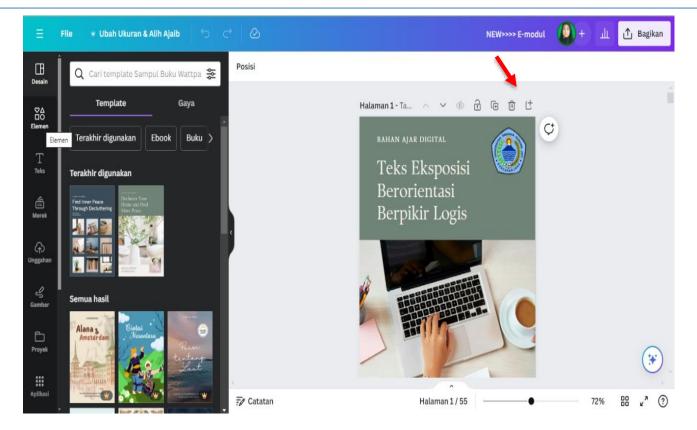
The design of this digital teaching material uses several applications, namely: 1). Canva.com application, 2). Sound of the text app to create sounds in videos, 3). Recorder inside smartphone to record the researcher's voice, 4). QR scanner in Smartphone to create barcodes, 5). Youtube page to save videos and share videos, 6). Google form to save the results of students' answer.

The design of digital teaching material consist of some steps, namely Analysis, Design, Development, Implementation and Evaluation. They are :

- 1). At The Analysis stage, researcher analyze curriculum and learning material. Analyzing the revised Curriculum, researcher analyzes the Core Competition (KI) and The Basic Competition (KD) as well as the content of material and their learning objectives stated in the curriculum 13 syllabus (revision) of 2016. 2). The analysis of material namely exposition text is determined based on elements of content, structure, linguistic rules and logical thinking characteristics. Researchers analyzed 12 exposition texts that came from different learning sources. These learning resources include textbooks, digital newspapers and other learning resources. This exposition text is analyzed based on the elements of the text content, text structure, linguistic rules and logical thinking characteristics of the exposition text. Results of this material analysis.
- 2). At The Design stage, the researchers design the teaching material of exposition text logical thinking-oriented in Ms. Word. Its contents are: cover, Foreword, table of contents, preface, concept map, basic competencies, learning objectives, materials 1, 2, 3, evaluation, summary, glossary, bibliography, author biodata, author copyright. Creating Digital material using Canva application. It was made into flipbook and teaching material pdf version.

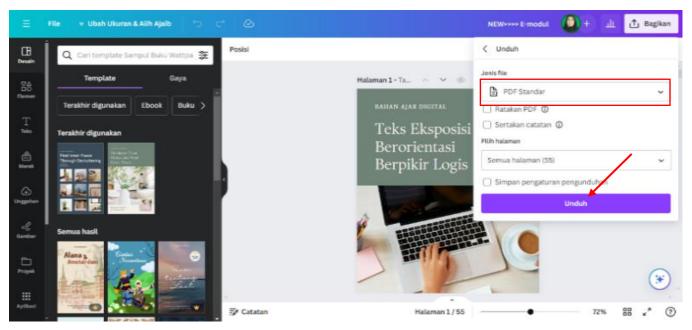
Here is the sample of the steps how to fill the text and picture on a template available by using Canva application.





Picture 1. Click duplicate icon

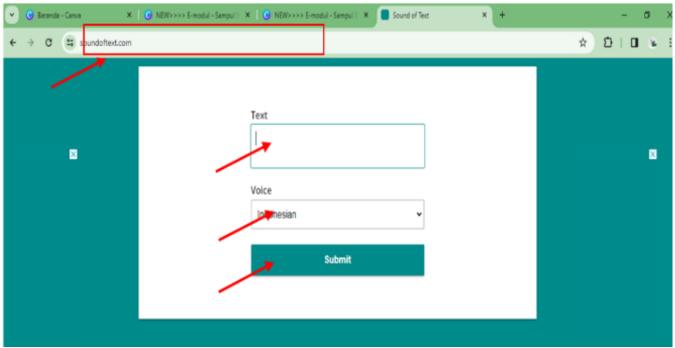
After finishing making the e-book, the next step is to download the teaching material ebook that we have created. The author wants to download in pdf format, then in the icon bar of the file type click "pdf Standard", then select the page with "all pages" and click "download". After waiting for a while, the digital teaching material file has been downloaded in the download folder in pdf format, and the digital teaching material can be opened anytime needed in the teaching and learning process.



Picture 2. Click Standard pdf to download

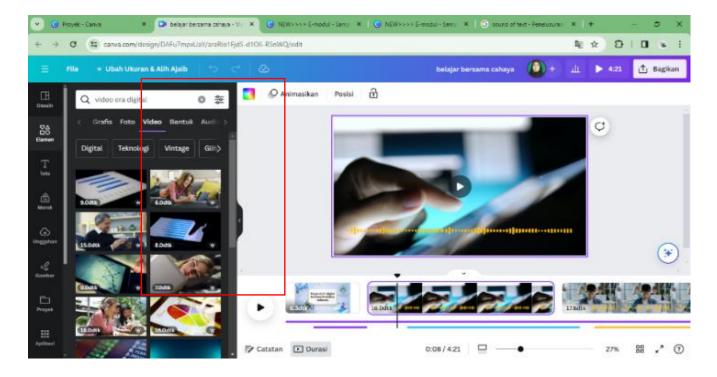
Creating video narrative. The author uses the "Sound Of Text" application, an application to convert text into sound. The first step, open the google browser and type "Sound of Text" in the search field, then several website address links will be presented, then select and click on the website address soundoftext on the first line, which is directed to the https://soundoftext.com link.





Picture 3. Changing the text into sound

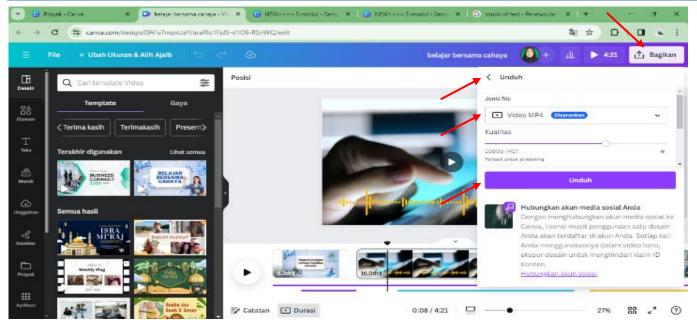
Inserting video elements that match the theme of the video to be created, from the video collection provided by Canva. After getting the matching video element, click on the selected video element and it will be displayed on the work screen and adjust to the full size of the work screen. Add a few more videos by clicking the Add icon, so that there is enough between the length of the video and the audio duration.



Picture 4. Adding Video element

Save your video by exporting it to the desired format (MP4, GIF, etc.). Select the MP4 video file type file type and click "download". Wait for a while then the Video file will be saved in the folder of our device.





Picture 5. Save and share menu

3). At the development stage, Before this digital teaching material is implemented to students, it is necessary to develop this exposition text digital teaching material by making the teaching material suitable for use by teachers or students. The researcher asked linguistics, materials and media experts to validate the design of this digital teaching material. after being validated by 3 experts, namely linguists, material experts, and graphic experts. The percentage of eligibility of this teaching material is $\frac{3,23}{4} \times 100\% = 80.75\%$. The following are the percentages of the score range and the percentage and feasibility of this logical thinking-oriented digital teaching material.

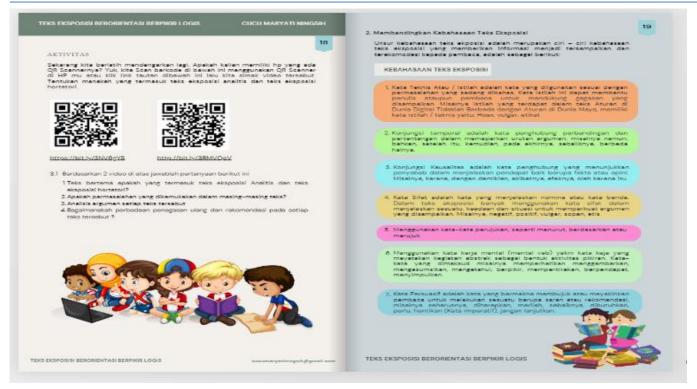
Table 1. Percentage of eligibility of teaching materials

Rentang Skor	Presentase	Kategori
3 - 4	76 % = P = 100 %	Sangat Baik
2 - 3	51 % = P = 75 %	Baik
1 - 2	26 % = P = 50 %	Kurang
0 - 1	0 % = P = 25 %	Kurang Baik

Based on the results of the calculation above, the results of the assessment from material, language and media experts on the feasibility of the content, presentation, language and graphics of digital teaching materials for logical thinking-oriented exposition texts in the form of flipbook digital teaching materials, as a whole reached 80.75%. If the percentage obtained reaches 76% to 100%, then the flipbook E-module is categorized as very valid.

The development of this teaching material produce digital teaching materials for logical thinking-oriented exposition texts in the form of pdfs and flipbooks. This material consist of a cover, concept map, learning objectives, until author biodata. It also contains some materials in videos to practice listening, reading and writing that can be accessed in youtube by scanning the link.





Example of digital teaching materials oriented to logical thinking.

4). At the implementation stage, the researcher implemented teaching materials in 3 classes from different schools, namely: SMAN 1 Gantar Indramayu, SMKN 1 Gantar Indramayu, MA Ma'had Al-Zaytun.

The implementation of this digital teaching material is to assess the effectiveness of teaching materials when using exposition text digital teaching materials. The author has designed and developed an assessment in the form of practice questions in digital teaching materials for exposition texts. The assessment uses a Curriculum of 13 exposition texts consisting of 4 Basic Competencies, namely: 1). K.D. 3.3 Identify (problems, arguments, knowledge, and recommendations) of exposition texts heard and/or read. And 2). K.D. 4.3 Develop the content (Problems, arguments, knowledge and recommendations) of exposition texts orally and in writing. 3). K.D. 3.4 Analyze the structure and language of exposition texts. And 4). K.D 4.4 Constructing exposition texts by paying attention to the content (problems, arguments, knowledge and recommendations) of structure and language. Questions/exercises are given before they use the exposition text teaching materials and after they are given the exposition text teaching materials. When students use digital teaching materials, students work on their answers in a google form listed in the digital teaching materials of logical thinking-oriented exposition texts. Results The implementation of this logical thinking-oriented exposition text digital teaching material uses the Likert scale.

- 5). At the evaluation stage, the researcher As an evaluation of the digital teaching materials of exposition texts that have been tested, the researcher also provided a student response questionnaire as additional data to find out students' responses to the teaching materials, using google forms to students from 3 different schools.all questionnaires have good responses. There are 97.6%,99%, 83%,75,6%, 80,5%, 94,8%, 90,3%, 87,8%, 78.1% agree, and very agree respondents.
- 2]. In this stage, the researcher described the results of the research, by conducting a trial or implementation of digital teaching materials for logical thinking-oriented exposition texts to measure the effectiveness of exposition text teaching materials in the field in answering the formulation of the second problem. This information can be proven by a data collection instrument in the form of a student learning outcome test that uses a likert scale and then assessed with a paired sample test (Test-T)

The following is a table of student learning outcomes before and after students use digital teaching materials for logical thinking-oriented exposition texts at SMK Negeri 1 Gantar



Table 2. Outcome Data of SMKN 1 Students Before and After Implementation

No.	Nama siswa	Pretes	Postes	Perbedaan	
1	X TO2 1	78	89.55	11.55	
2	X TO2 2	75	88.27	13.27	
3	X TO2 3	70	87.45	17.45	
4	X TO2 4	80	90.73	10.73	
5	X TO2 5	82	90.27	8.27	
6	X TO2 6	65	85.55	20.55	
7	X TO2 7	60	84.18	24.18	
8	X TO2 6	64	81.91	17.91	
9	X TO2 5	65	87.00	22.00	
10	X TO2 6	70	85.09	15.09	
11	X TO2 7	62	84.36	22.36	
12	X TO2 8	80	86.82	6.82	
13	X TO2 9	56	81.18	25.18	
14	X TO2 10	76	81.27	5.27	
15	X TO2 11	70	81.18	11.18	
16	X TO2 12	60	79.55	19.55	
17	X TO2 13	70	81.00	11.00	
18	X TO2 14	62	83.91	21.91	
19	X TO2 15	50	76.73	26.73	
20	X TO2 16	60	80.00	20.00	
21	X TO2 17	60	82.64	22.64	
22	X TO2 18	75	81.18	6.18	
23	X TO2 19	67	81.18	14.18	
24	X TO2 20	80	83.82	3.82	
25	X TO2 21	82	88.55	6.55	
26	X TO2 22	55	83.09	28.09	
27	X TO2 23	50	78.09	28.09	
28	X TO2 24	75	85.18	10.18	
Rerata Skor		67.82	57.82 83.92 16.1		
Penin	gkatan		80,82%		

Based on the table above, all student learning outcomes after using the teaching materials increased by 80.92% with an average pretest score of 67.82 and after the implementation of this digital teaching material increased to 83.92. So there is a significant difference.

This can be proven from the results of student learning scores during the post test which is calculated with the Likert scale and the T test on the assessment of student learning outcomes using digital teaching materials of logical thinking-oriented exposition texts

Paired Differences 95% Confidence Interval of the Difference Std. Std. Error Sig. (2df Mean Deviation Mean Lower Upper tailed) Pre_Test --16.09750 7.46208 1.41020 -18.99099 -13.20401 -11.415 27 .000 Pair 1 Post_Test

Tabel 3. Paired Sample T-Test SMKN 1 Value Test

Based on the table above, the paired sample t-test score of SMKN 1 above is known to be the difference in the average score of learning outcomes before and after using logical thinking-oriented digital teaching materials for SMA/MA/SMK of 16.097; The calculated value is 11.415 > 1.701; The value of sig. (2-tailed) 0.000 < 0.05. Based on these values, it can be concluded that there are differences in learning outcomes before and after using logical thinking-oriented digital teaching materials for SMA/MA/SMK. This difference has increased significantly. This can be seen from the increase in test results on the overall average from before using the product and after using the product.

The following is a table of student learning outcomes before and after students use digital teaching materials for logical thinking-oriented exposition texts at SMA Negeri 1 Gantar.



Table 4. SMAN 1 Student Learning Outcome Data Before and After Implementation

No.	Nama Siswa	Pretes	Postes	Perbedaan		
1	X-A 1	65	79.18	14.18		
2	X-A 2	70	82.73	12.73		
3	X-A 3	50	78.27	28.27		
4	X-A 4	40	81.09	41.09		
5	X-A 5	78	84.36	6.36		
6	X-A 6	70	82.27	12.27		
7	X-A 7	72	79.91	7.91		
8	X-A 8	60	81.55	21.55		
9	X-A 9	62	81.73	19.73		
10	X-A 10	60	82.09	22.09		
11	X-A 11	68	82.82	14.82		
12	X-A 12	30	77.09	47.09		
13	X-A 13	55	79.73	24.73		
14	X-A 14	75	83.18	8.18		
15	X-A 15	78	84.55	6.55		
16	X-A 16	60	78.64	18.64		
17	X-A 17	70	83.45	13.45		
18	X-A 18	78	86.82	8.82		
19	X-A 19	65	76.00	11.00		
20	X-A 20	45	76.45	31.45		
21	X-A 21	70	79.55	9.55		
22	X-A 22	60	75.27	15.27		
Rerata Skor		62.77	80.76	17.99		
Penin	gkatan	77.73%				

Based on the table above, all student learning outcomes after using the teaching materials increased by 77.73% with an average pretest score of 62.77 and after the implementation of this digital teaching material increased to 80.76. So there is a significant difference. According to the learning outcomes of the students above, it can be concluded that this digital teaching material product of logical thinking-oriented exposition texts is effective for learning.

This can be proven from the results of student learning scores during the post test calculated with the Likert scale and the T test on the assessment of student learning outcomes using d igital teaching materials of logical thinking-oriented exposition texts. The author uses the paired sample t-test formula, which can be seen in the following table

-	-	Paired Differences							
			Std.	Std. Error	95% Confidence Interval of the Difference				
		Mean	Deviation	Mean	Lower	Upper	T	Df	Sig. (2-tailed)
Pair 1	Pre_Test - Post_Test	-17.98773	10.96911	2.33862	-22.85116	-13.12430	-7.692	21	.000

Table 5. Paired Sample T-Test SMAN 1 Gantar Value Test

Based on the table above, the paired sample t-test in the SMAN 1 score above is known to have a difference in the average score of learning outcomes before and after using logical thinking-oriented digital teaching materials for SMA/MA/SMK of 17.987; The calculated value is 7.692 > 1.717; The value of sig. (2-tailed) 0.000 < 0.05. Based on these values, it can be concluded that there are differences in learning outcomes before and after using logical thinking-oriented digital teaching materials for SMA/MA/SMK. This difference has increased significantly. This can be seen from the increase in test results on the overall average from before using the product and after using the product.

The following is a table of student learning outcomes before and after students use digital teaching materials for logical thinking-oriented exposition texts at MA Ma'had Al-Zaytun, Indramayu.



No.	Nama Siswa	Pretes	Postes	Perbedaan		
1	X N 05 1	70	84.09	14.09		
2	X N 05 2	45	80.55	35.55		
3	X N 05 3	75	86.00	11.00		
4	X N 05 4	78	91.91	13.91		
5	X N 05 5	60	83.00	23.00		
6	X N 05 6	62	83.09	21.09		
7	X N 05 7	65	83.18	18.18		
8	X N 05 8	80	84.00	4.00		
9	X N 05 9 70		87.91	17.91		
10	X N 05 10	78	86.18	8.18		
11	X N 05 11	60	79.82	19.82		
12	X N 05 12	55	83.73	28.73		
13	X N 05 13	54	78.55	24.55		
Rerata Skor		65.54	84.00	18.46		
Penin	okatan	78 02%				

Table 6. MA Student Learning Outcome Data Before and After Implementation

Based on the table above, based on the table above, all student learning outcomes after using the teaching materials have increased by 78.02% with an average pretest score of 65.54 and after the implementation of this digital teaching material it has increased to 84.00. So there is a significant difference.

According to the learning results of the students at MA Stud, it can be concluded that this digital teaching material product of logical thinking-oriented exposition texts is effectively used for learning. This can be proven from the results of student learning scores during the post test calculated with the Likert scale and the T test on the assessment of student learning outcomes using digital teaching materials of logical thinking-oriented exposition texts. The author uses the paired sample t-test formula, which can be seen in the following table.

Table 7. Paired Sample T-Test MA Students Value Test

			0.1	0.15	of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	Pre_Test - Post_Test	-18.46231	8.53722	2.36780	-23.62130	-13.30332	-7.797	12	.000

Based on the table above, the paired sample t-test in the MA score above is known to be the difference in the average score of learning outcomes before and after using logical thinking-oriented digital teaching materials for SMA/MA/SMK is 18.462; The calculation value is 7.797 > table 1.771; The value of sig. (2-tailed) 0.000 < 0.05. Based on these values, it can be concluded that there are differences in learning outcomes before and after using logical thinkingoriented digital teaching materials for SMA/MA/SMK. This difference has increased significantly. This can be seen from the increase in test results on the overall average from before using the product and after using the product.

In this study, it can be concluded that this digital teaching material of logical thinking-oriented exposition text is effectively used in learning. Because based on the results of the t-test on the learning outcomes of students from 3 different schools, SMK Negeri 1 Gantar, SMA Negeri 1 Gantar and MA Negeri 1 Gantar produced a significant difference better than before using digital teaching materials for exposition texts oriented to logical thinking.

B. DISCUSSION

1. Design of teaching materials for logical thinking-oriented exposition texts for students in grade X of SMA/SMK/MA. This digital teaching material is presented using the Canva application in the form of pdf and flipbook. In the creation of this digital teaching material, an application is needed, such as Initially, based on a survey analyzing the needs of teaching materials in schools, teachers need additional teaching materials that can motivate students to learn, so that students do not feel bored with conventional teaching materials in the form of printed books. Along with the digital era, learning also needs teaching materials that are interactive, interesting and effective. So the researcher in this case made an exposition text digital teaching material



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using the Canva application with product results in the form of pdf and flipbook in which there are multimedia elements such as audio/video, and a video discussion of the questions made on the researcher's own youtube channel page, and how to access the video by clicking on the link/link contained in the e-module in the form of pdf and flipbook, or use the QR Scanner installed in the smartphone to scan the barcode contained in the teaching material. The advantages of this logical thinking-oriented exposition text digital teaching material are: 1). Arousing students' interest and motivation in learning exposition texts by presenting attractive images and colors and multimedia elements in the teaching material product. 2). Easily understand the exposition text with practice questions/examples, and evaluations that are presented in writing/oral audio/visual. 3) There is an evaluation in the form of practice questions, so that teachers as users and students can find out which part of the exposition text material has not been fully understood. 4). This digital teaching material makes it easier for teachers and students to use it anywhere and anytime. 5). This digital teaching material is very suitable for teachers to use as users according to language, material and media validators. The disadvantages of this exposition text digital teaching material are 1). The creation of digital teaching materials requires considerable costs and a short time. It takes a long time to revise many times. 2). If the user does not have an internet quota, then he cannot open the required interactive learning videos. 3). According to practitioners, the text used must be appropriate to the age of the student and 4). For some students, this teaching material is a bit difficult to work on because it requires concentration and in-depth knowledge in understanding it.

2. The Effectiveness of Digital Teaching Materials Exposition Texts Oriented to Logical Thinking for Grade X Students of SMA/MA/SMK

The results of the application of digital teaching materials for exposition texts illustrate that the value of the test results has increased significantly compared to when not using this teaching material. The results of the application of teaching materials at SMK N 1 gantar with the paired sample t-test, it is known that the difference in the average score of learning outcomes before and after using logical thinking-oriented digital teaching materials for SMA/MA/SMK is 16.097; The calculated value is 11.415 > 1.701; The value of sig. (2-tailed) 0.000 < 0.05. At SMA N 1 Gantar is 17,987; the calculation value is 7,692 > ttable 1,717; The value of sig. (2-tailed) 0.000 < 0.05. While in MA Ma'had Al-Zaytun it was 18,462; the calculation value was 7,797 > 1,771; The value of sig. (2-tailed) 0.000 < 0.05. The results of the implementation also conclude that this digital teaching material is effective. Effectively used in learning Indonesian Language exposition text material for class X for SMA/MA/SMK Because in terms of appearance, this digital teaching material has an olive green color, attractive green images and videos. Videos, practice questions and examples can help understanding in learning exposition texts. In terms of material, this teaching material also trains students to be able to think logically, distinguish facts and opinions that are part of argumentation, and understand the structure of exposition texts easily. And students are also happy if this digital teaching material is used as an additional teaching material and a reference for learning exposition material. This digital teaching material for logical thinking-oriented exposition texts is effective to be used in Indonesian Language learning class X exposition text material because it provides an effective learning experience for students. Increase students' interest in being able to understand exposition texts. As a digital teaching material, exposition texts that are suitable for learning and make it easier for teachers as users and students as learners to be able to take them anywhere and anywhere so that this digital teaching material is able to motivate students to become independent learners. Coupled with the content of the material, sample questions and practice questions packaged in the form of videos stimulate students to keep watching videos accessed on the youtube page, making the learning experience different and impressive

IV.CONCLUSIONS

Based on the problems and objectives of this research, after the data is analyzed and discussed, it can be concluded as follows.1). Teaching Digital Exposition Texts oriented to Logical Thinking for SMA/MA/SMK is suitable for use based on the results of validation by linguists, materials and languages, as well as according to practitioners/teachers. This exposition text digital teaching material is designed in the form of pdfs and flipbooks, using the Canva application. On each page, it is attractively packaged with colors and images that match the material. The material is equipped with exposition texts related to social problems that are selected after analysis based on the criteria of structural completeness, elements, linguistic rules, and logical thinking characteristics. This teaching material is equipped with videos of listening, reading and viewing exercises and practice tests in the form of evaluations. The video was created using sound from the sound of the text app and the sound recorded by the researcher. The video is made and uploaded on the Youtube page created by the researcher related to the material that can be accessed by clicking on the link (link) / scanning the barcode accessed using the researcher's Youtube channel, has a relationship with the content of the material presented. In addition to barcodes / links (links), there are also images to add understanding and also attraction for readers. 2). The Effectiveness of Digital Teaching Materials Exposition Text for Logical Thinking Exposition Text for SMA/MA/SMK is good for learning Indonesian Language exposition text material for grade X students, because before and after the trial experienced significant developmental differences after being assessed using the T-Test. 3). This digital teaching material Oriented to logical thinking for students in grade X SMA/MA/SMK can be used as an alternative teaching material in Indonesian Language learning activities exposition text material. 4). Digital teaching materials can be used in online/offline learning because teachers can download and save them in pdf files or print them as printed teaching materials.



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