



A New Model of *Kalam* Material Through Cybernetic Approach: Development Stages and The Influence Towards Speaking Skills of Students'

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Abstract: Speaking skill is considered the most difficult to learn. On the other hand, speaking subject is considered a failure in providing competence to students. This can be proven by the lack of student's ability to speak Arabic and the value of learning outcomes. This study aimed to develop cybernetic-based *kalam* materials that can be used by students at the junior high school level as innovations in the use of teaching materials and learning theory. This research used the R&D method by adapting the six steps of Borg and Gall model development. Meanwhile, a small group trial was conducted on 24 students of an Islamic junior high school in Ogan Ilir, using by purposive random sampling technique. This research resulted in *kalam* material products using the Canva application. The validation of material experts is 84% and media experts get 90.76% so it can be concluded that the product developed is suitable for use with the revisions suggested by validators. Based on the comparison of pretest results showed an average of 48.33 and the post-test results were 78.33. Then continued with the nonparametric test, namely the Wilcoxon test. This test was chosen because the data is not distributed normally. Asimp Wilcoxon. Sage. (2-tailed) equals 0.000. Since the value of 0.000 is less than 0.05, it can be concluded that the "hypothesis is acceptable". The results of the effectiveness test showed the development of Cybernetic-based speaking materials in improving knowledge and skills in speaking languages.

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Introduction

In line with the times, the way and style of learning has changed so rapidly and all are influenced by technological advances.¹ The development of technology is assumed to make it easier for learners to learn everything with various kinds of media, such as printed materials, television programs, images, audio, and so on so that all of it encourages changes in the role of facilitators in managing the learning process. Likewise, *kalam* material can be developed by following the flow of technological advances.² Arabic learning is one of the core subjects taught in madrassas/schools. Apart from being the language of the Qur'an, Arabic has an important role in human association today which has entered the world of globalization of information and communication.³ Arabic learning faces various problems, as a consequence of global challenges and the rapid development of information and communication technology.

In addition, Arabic learning faces various problems, including a growing stigma among students that Arabic subjects, especially speaking skill is considered complicated. It could be that the teacher who taught missteps in applying strategies and methods in learning Arabic.⁴ Every Arabic learning will not be separated from methods, strategies, and media.⁵ Each language has different levels of difficulty and ease depending on the character of the language itself.⁶ The selection of the right methods, strategies, and media will certainly reduce learning problems. Some linguists assume that a person's linguistic ability is determined only by the level of mastery of vocabulary.⁷ This is certainly relevant to language skills as a communication tool must first master vocabulary (*mufradat*).

¹ Salman Alfarisi Salman and Ari Septiawati, "Suitability of Maharah *Kalam* Learning Achievement in JSIT Arabic Learning Curriculum With CEFR," *Al-Hikmah: Journal of Religion and Science* 19, no. 2 (January 4, 2022): 231–255, [https://doi.org/10.25299/al-hikmah:jaip.2022.vol19\(2\).9543](https://doi.org/10.25299/al-hikmah:jaip.2022.vol19(2).9543).

² Darwati Nalole, "Meningkatkan Keterampilan Berbicara (Maharah al-*kalam*) melalui Metode Muhadtsah dalam Pembelajaran Bahasa Arab," *Al-Minhaj: Jurnal Pendidikan Islam* 1, no. 1 (2018): 129-145.

³ Ubaid Ridho, "Evaluasi dalam Pembelajaran Bahasa Arab," *An Nabighoh Jurnal Pendidikan dan Pembelajaran Bahasa Arab* 20, no. 01 (2018): 19-26, <https://doi.org/10.32332/an-nabighoh.v20i01.1124>.

⁴ Nandang Sarip Hidayat, "Problematika Pembelajaran Bahasa Arab" *Jurnal Pemikiran Islam* 37, no. 1 (2012).

⁵ Zamri Ahmad and Ibtisam Abdullah, "Metode Pengajaran dan Pembelajaran Bahasa Arab Berasaskan Empat Kemahiran," *Prosiding Pengajaran & Pembelajaran Bahasa Arab* (2014).

⁶ Siti Mahmudah, "Media Pembelajaran Bahasa Arab," *An Nabighoh Jurnal Pendidikan dan Pembelajaran Bahasa Arab* 20, no. 01 (2018): hlm. 129, <https://doi.org/10.32332/an-nabighoh.v20i01.1131>.

Maharah kalam material is a very important part of learning Arabic skills to improve students' ability to speak Arabic.⁸ However, in reality often speaking skills are considered difficult skills to understand. On the other hand, maharah learning is considered a failure in providing competence to learners. This can be proven by the lack of students' ability to speak Arabic and the value of learning outcomes.⁹ Based on initial observations made in one of the tsanawiyah madrasahs in Ogan Ilir Regency, field data were obtained that the source of teaching materials only used textbooks and did not utilize technology, as well as from the learning outcomes of students who did not meet the assessment criteria expected by the Arabic teachers who taught and the results of interviews that students often felt bored not interested and motivated.

On Saturday, November 21, 2022, a preliminary study was conducted through interviews with the Vice Principal of Curriculum and Arabic teachers. Students are not active and often feel bored in learning Arabic because Arabic is considered difficult. The material used by the teacher is the material in the Arabic package book class IX. The material studied is the Birthday of the Prophet Muhammad SAW, Isra Mi'raj, Eid al-Fitr. Using whiteboard media and not yet using interesting and innovative learning media. The learning method used is the discovery learning method. But this method doesn't work well. The teacher in his practice uses the lecture method. The evaluations listed on the lesson plan by the Arabic teacher are observation, written tests, assignments, and practice. However, in its application, teacher evaluation still uses the written test method only.

Based on facts in the field, it is known that traditional learning makes it difficult for people to process information which has an impact on learning outcomes of low Arabic speaking skills. Cybernetic theory is present as an alternative solution because it is unfortunate if it does not utilize learning theory that allows it to help overcome problems in the learning process, especially learning Arabic to meet the needs of

⁷ Azman Ismail, "Dinamika Perkembangan Pembelajaran Bahasa Arab; Antara Teori dan Praktek," *Lisanuna: Jurnal Ilmu Bahasa Arab dan Pembelajarannya* 6, no. 2 (2017): 338-362.

⁸ Muspika Hendri, "Pembelajaran Keterampilan Berbicara Bahasa Arab melalui Pendekatan Komunkatif," *Potensia: Jurnal Kependidikan Islam* 3, no. 2 (2017): 196-210. <https://doi.org/10.24014/potensia.v3i2.3929>.

⁹ Imam Wahyudi and Siti Umi Azizatul Khofifah, "Media Talking Stick dalam Pembelajaran Maharah MA Assunniyah Jember," *An-Nuqthah* 1, no. 3 (2022): 63-69.

students. Cybernetic theory itself must use technological media in the learning process.¹⁰ Therefore, researchers want to include comic media that contains explanations of the material that will be taught in learning. Comics were chosen because they are an interesting medium that is very interesting in students' lives, and it is a fact that some students easily recognize and remember the characters from the comics they see.

One of the advantages of this theory is learning control which allows learning according to the rhythm of each individual. But this theory also has the disadvantage that it is often criticized for placing too much emphasis on the information system being studied and paying less attention to how the learning process. However, this method or approach can be realized if students can process information, monitor, and strategize all information obtained.¹¹ Learning that applies cybernetic theory has been done a lot in the world of learning. However, usually this theory is applied in general learning such as learning mathematics, Indonesian, and others. This research intends to develop *kalam* material using textbook sources other than textbooks with an approach that has never been applied in the school, namely cybernetic learning theory. Cybernetic learning theory is a learning theory that emphasizes the learning process and uses technology in obtaining fast and precise information. The purpose of this lesson is to improve students' ability to receive information and be creative in their learning.

Learning that applies cybernetic theory has been done a lot in the world of teaching. However, usually, this theory is applied in general learning such as learning mathematics, Indonesian, and others. Such as there is a significant influence from the results of the development of mathematics teaching materials based on cybernetic approaches using drive *software* applications, as well as a positive response from learning outcomes after the application of¹² cybernetic learning theory to Islamic Education learning.¹³

¹⁰ Salim Salim and Era Maryanti, "Pengembangan Perangkat Pembelajaran Matematika melalui Teori Pembelajaran Siberetik Berbantuan Software Derive," *Jurnal Riset Pendidikan Matematika* 4, no. 2 (2017): 229-238, <https://doi.org/10.21831/jrpm.v4i2.16068>.

¹¹ Erlita Octiana Nur'alimah, "Implementasi Teori Siberetik pada Pembelajaran Jarak Jauh Masa Pandemi Covid-19," *Jurnal Syntax Imperatif: Jurnal Ilmu Sosial dan Pendidikan* 3, no. 1 (2022): 36, <https://doi.org/10.36418/syntax-imperatif.v3i1.146>.

¹² Salim Salim and Era Maryanti, "Pengembangan Perangkat Pembelajaran Matematika melalui Teori Pembelajaran Siberetik Berbantuan Software Derive," *Jurnal Riset Pendidikan Matematika* 4, no. 2 (2017): 229-238, <https://doi.org/10.21831/jrpm.v4i2.16068>.

¹³ Surya Bakti and Halimatus Sakdiah, "Pengaruh Penerapan Teori Belajar Siberetik terhadap Efektivitas Pembelajaran PAI di SMP Putra Jaya Stabat Kabupaten Langkat," *Wahana Inovasi: Jurnal Penelitian dan Pengabdian Masyarakat UISU* 10, no. 1 (2021).

There is also a significant influence When the application of cybernetic learning methods on the ability to write student descriptions, as well as Civic Education learning which is¹⁴ applied in which cybernetic methods have a very large influence on student learning outcomes,¹⁵ and also as explained that the many applications of cybernetic theory in Islamic Education learning and all of them show effectiveness in learning outcomes student.¹⁶ Studies that have been carried out by previous researchers, there seem to be research that links conversation learning with this theory. Therefore, in this study, researchers intend to develop teaching materials or speaking material, or Arabic conversations using comic-based cybernetics to increase student learning motivation and student learning outcomes in learning Arabic.

Methods

This research uses research and development methods or research and development (R&D), this method was chosen because the purpose of this research is to develop cybernetic-based teaching material products and at the same time test the effectiveness of the product from the results of the development. The research and development step adapts the Borg and Gall development model by taking only six development steps. This is justified by Borg and Gall, to simplify the pace of development, for student research. The six development steps, namely: potential and problem analysis, data collection, product design, product validation, product revision, and product testing.

The location of this research was conducted at MTs Negeri 03 Ogan Ilir located in Payaraman village, Ogan Ilir Regency, South Sumatra. Because the school still uses conventional teaching materials in the form of books. This research is focused on producing a technology-based natural material product, namely cybernetics. The unit of analysis in this study is to see the improvement of student learning outcomes by comparing test results before and after the practice of using product development.

¹⁴ Tuti Herawati, "Pengaruh Metode Sibermetik terhadap Kemampuan Menulis Deskripsi," *Jurnal Dialog* 1, no. 1 (2014).

¹⁵ Isnaini, and Uswatun Chasanah, "Penerapan Teori Sibermetik sebagai Upaya Menumbuhkan Kemampuan Berfikir Kritis Siswa pada Mata Pelajaran PPKN Kelas XI SMK Negeri 3 Klaten Tahun Pelajaran 2020/2021," *Disertasi Universitas Widya Dharma Klaten* (2021).

¹⁶ Sartina, "Implementasi Teori Belajar Sibermetik dalam Pembelajaran PAI untuk Membentuk Kemampuan Memecahkan Masalah pada Peserta Didik di UPT SMK Negeri 2 Wajo," *Disertasi Universitas Islam Negeri Alaudin Makassar* (2018).

This peculiarity of R&D research has several stages with different respondents. In the early stages of potential and problem analysis, data sources were obtained from MTs 3 Payaraman teacher and student Ogan Ilir to map the needs analysis. At the data collection stage, data sources are documents, such as Lesson plan, Syllabus, and Canva media. Furthermore, the respondents of the validation test, namely the expert team consisting of experts in the field of Arabic learning and media experts. The student respondents for the product effectiveness test were all class 9.1 students totaling 24 students, and sample selection using purposive random sampling techniques.

Data collection techniques consist of observation sheets, interview questionnaires, and tests. The observation sheet was used to see directly the phenomenon of learning *kalam* material in MTs Negeri 3 Payaraman Ogan Ilir Sumatera Selatan. Also, for documentation studies use observation sheets to guide the acquisition of the required data. The questionnaire contains questions that are distributed to teachers and students for potential and problem analysis, which in turn can map the needs analysis. The questionnaire sheet was also distributed by material experts and media experts as validators of the developed product.

This product validation is carried out to determine the feasibility of products resulting from the development of cybernetic-based *kalam* material. Furthermore, pre-test and post-test questions were distributed to students before and after the learning experiment process using cybernetic-based teaching materials. The data obtained from observations and interviews will be analyzed using four steps, namely: data collection, data reduction and categorization, data appearance, and conclusions. The data obtained from the results of the questionnaire were calculated using Microsoft Excel and test calculations to determine the learning outcomes before and after using the products developed by the researcher were analyzed using *SPSS*.

Results and Discussion

This research goes through two stages, the first stage is product development and the second stage is product trials. Product development departs from the analysis of potential problems. Mts N 3 Ogan Ilir Regency has accredited A it is known to have good Arabic teaching resources and a large number of students. Based on data in the field, it was found that there is potential for students as a creative generation and able to apply the knowledge they have in everyday life. However, the reality shows that mastery

of Arabic skills is still low, and there is a lack of motivation and interest of students in learning Arabic, especially in *kalam* material. Information was also obtained that the material has not varied or still depends on the package book, and has not used IT-based learning methods.

Likewise, the application of discovery learning methods and problem-based learning in teacher's lesson plan for the Arabic learning process in improving speaking skill has not been carried out.¹⁷ Teachers still use the lecture method and memorize vocabulary in the learning process. To improve speaking skills, way used by teachers just to deliver sentences and students follow them. It has not used conversational practice as a way to assess the extent of learners' speaking skills. Have never developed teaching materials and have not used interactive media in the learning process. Based on the results of observations and interviews, knowledge can be obtained related to the potential problems that exist in learning *kalam* material.

To strengthen data related to the potential and problems of learning *kalam* material, for this reason, a questionnaire of student needs was carried out with 10 questions addressed to students of grade IX.1 MTs N 3 Ogan Ilir Sumatra Selatan. Based on the results of the responses answers, calculations were carried out using the Likert scale: The following are the results of the student needs analysis questionnaire calculated using Microsoft excel in the table 1.

¹⁷ Alfianor Alfianor, "Pengelolaan Pembelajaran Maharah Istima' dan Kalam oleh Himpunan Mahasiswa Prodi PBA STIQ Amuntai," *Al Qalam: Jurnal Ilmiah Keagamaan dan Kemasyarakatan* 16, no. 2 (2022): 420-430, <https://doi.org/10.35931/aq.v16i2.869>.

Table 1. Results of the students' need questionnaire

Nothing													
1	5	4	2	2	4	5	4	4	4	4	38	50	76,00
2	3	4	3	4	3	4	3	3	3	4	34	50	68,00
3	5	4	2	2	3	5	3	4	4	4	36	50	72,00
4	3	4	3	4	3	4	3	3	3	3	33	50	66,00
5	4	5	1	2	4	5	3	4	4	4	36	50	72,00
6	4	5	1	3	2	4	3	4	4	4	34	50	68,00
7	3	5	2	3	3	4	4	4	4	4	36	50	72,00
8	4	5	1	2	4	4	3	3	4	4	34	50	68,00
9	3	5	2	3	4	4	4	4	4	4	37	50	74,00
10	4	4	1	3	4	4	4	4	4	5	37	50	74,00
11	4	5	1	3	2	4	2	4	4	3	32	50	64,00
12	3	3	2	4	5	4	3	3	3	4	34	50	68,00
13	3	4	2	3	4	5	5	3	4	3	36	50	72,00
14	4	5	4	2	4	4	5	4	4	5	41	50	82,00
15	3	4	2	4	4	5	5	3	4	3	37	50	74,00
16	3	4	2	4	5	4	3	3	4	3	35	50	70,00
17	4	4	1	2	2	5	5	5	4	5	37	50	74,00
18	3	4	2	2	5	5	4	4	3	4	36	50	72,00
19	4	4	1	2	3	3	3	3	4	4	31	50	62,00
20	3	4	2	3	4	5	5	3	3	4	36	50	72,00
21	4	5	2	2	4	4	4	4	4	4	37	50	74,00
22	3	4	2	3	2	5	4	4	3	4	34	50	68,00
23	3	4	4	3	4	5	5	3	3	5	39	50	78,00
24	4	4	2	2	5	3	4	2	4	4	34	50	68,00

71,16667

Based on the results of the Likert scale calculation in the data tabulation table 1, it is known that the average percentage of respondents' answers is 71.16%, which means that students need the development of cybernetic-based kalam material made in the form of comics. The cybernetic approach and the use of comic media are approved by students to make them more active and want to try new ways/methods of learning. After analyzing student needs, the next step is developing a product design. Many things are done in the product design process of cybernetic-based material development made in the form of this comic.

After the product design is completed, the next step is product validation. The validation step is divided into two, namely material expert validation and media expert

validation. Validation by material expert lecturers aims to obtain information, criticism, and suggestions so that the material developed by researchers becomes a good product which includes aspects of material validity, suitability with the level of importance, usefulness, the possibility of learning, and encouragement of interest in learning. The results of expert validation are seen in the following table 2.

Table 2. Material Expert Validation Results.

Assessment Aspect	Assessment Indicators	Assessment items	Valuation	Shoes	
Kelayakan Fill	Material conformity with KI and KD	1.Completeness of material	SB	5	
		2.Breadth of material	CB	3	
		3.Suitability of the material to the purpose	SB	5	
	Accuracy of learning materials	1.Sample accuracy	B	4	
		2.Accuracy of questions	B	4	
	Learning material support	1.Attractiveness of the material	CB	3	
		2.Practice questions at the end of the learning activity	B	4	
	Kelayakan Serving	Serving technique	1.Consistency of presentation systematics in activities	B	4
			2.Presentation delay	SB	5
Presentation support		1.Examples of questions in presentation activities	B	4	
		2.Practice questions at the end of the learning activity	B	4	
		1.Part introduction	SB	5	
Valuation Language	Completeness of presentation Plays	2.Contents section	SB	5	
		1.Accuracy of sentence structure	CB	3	
	Communicative	2.Sentence effectiveness	SB	5	
		3.Bakut of terms	B	4	
		1.Message readability	SB	5	
	Conformity	2.Accuracy in using language rules	CB	3	
		Suitability of intellectual development of learners	SB	5	
	Use of terms and symbols	Continuity and integration between learning activities	B	4	
Total Score			84		
Score Percentage		84%			
Average Score		4,22			
Category		Excellent			

Based on the table 2, it can be seen that the aspect of material expert assessment consists of 19 aspects. The results of the calculation, the assessment results from the overall material expert reached 84%. If the percentage obtained reaches 80-100%, then the material developed is categorized as very good/valid.

The next validation is media validation aims to obtain information, criticism, and suggestions so that the research developed by researchers becomes a quality product related to the preparation of visual elements in good learning media. The results of validation by media experts can be described as follows.

Table 3. Media Expert Validation Results.

Assessment Aspect	Assessment Indicators	Assessment items	Valuation	Shoes
Graphic	Image quality	1.Accuracy of images with learning objectives	SB	5
		2.Image accuracy	SB	5
	Text accuracy	1.Keterbacaan will	SB	5
		2.Accuracy of text usage	B	4
Coloring	Matching colors supporting presentation	1.Color compatibility	SB	5
	Completeness of presentation	1.Accuracy of text usage	B	4
		Text proportions on the page	SB	5
Interactivity	Image precision	1.Accuracy of images in clarifying material	B	4
		2.Interest in images with learning objectives	B	4
		3.Interest in response back to question correction	B	4
	The effectiveness of the command	1.Clarity of commands to understand	SB	5
		2.Clarity of symbols to use	SB	5
	Font size conformity	1.Size fit to clarify the material text	B	4
Total Score			59	
Score Percentage			90,76%	
Average Score			4,53	
Category			Excellent	

Based on the table 3, it can be seen that the assessment aspect of media experts consists of 13 aspects. The results of the calculation, the assessment results from the overall media experts reached 90.76%. If the percentage obtained reaches 80-100%, then the developed media is categorized as very good/valid. After getting input or criticism suggestions from experts or lecturers related to the weaknesses and shortcomings of the speaking teaching material designed, several things still need to be improved according to validator input before the product is tested on students. The details of material improvements are in the table 4.

Table 4 Product Revisions

Validator	Offense	Revision
Material Expert	There are still language rules that are not correct Pay attention to the rules of nahwu and shorof.	Improve sentences according to input from validators, namely by changing sentences that do not conform to Arabic rules.
	Harokat has not perfect	Fixing the whole thing.
	Suggestion In order to further develop the material and learning media.	
Members of the media	Writing/fonts are more appropriate to use Arabic for Arabic text.	Improve the writing/font in accordance with criticism, namely by replacing the arrimo font with childos Arabic font.

The final stage of the steps of developing kalam material using a cybernetic approach is a small group trial. Trials are carried out using pretest and post-test experimental designs. The test results obtained are calculated using calculations in Microsoft Excel. Pretest and posttest were given to grade 9.1 students totaling 24 people where this class became the control class as well as the experimental class in this study. The pre-test questions consist of 8 questions and the post-test consists of 10 questions with assessment indicators, namely knowledge, intonation and letter pronunciation. The following is a table of pre-test and post-test results for grade 9.1 students at Mts N 3 Ogan Ilir.

Table 5. Pre-test and Post-Test Results

Scor N-Gain Calculation						
Name	Pre-test	Post-test	Post-test- pre test	Shoes Ideal-Pre test	N-Gain Scor	N-Gain Scor (%)
Student 1	50	80	30	50	0,6	60
Student 2	45	75	30	55	0,5454545	54,545
Student 3	55	80	25	45	0,5555556	55,555
Student 4	50	80	30	50	0,6	60
Student 5	55	85	30	45	0,6666667	66,666
Student 6	45	75	30	55	0,5454545	54,545
Student 7	50	80	30	50	0,6	60
Student 8	45	75	30	55	0,5454545	54,545
Student 9	40	75	35	60	0,5833333	58,333
Students 10	55	80	25	45	0,5555556	55,555
Students 11	45	75	30	55	0,5454545	54,545
Students 12	40	75	35	60	0,5833333	58,333
Students 13	50	80	30	50	0,6	60
Students 14	55	85	30	45	0,6666667	66,666
Students 15	50	80	30	50	0,6	60
Students 16	60	90	30	40	0,75	75
Students 17	50	80	30	50	0,6	60
Students 18	55	85	30	45	0,6666667	66,666
Students 19	40	70	30	60	0,5	50
Students 20	50	80	30	50	0,6	60
Students 21	45	75	30	55	0,5454545	54,545
Students 22	35	65	30	65	0,4615385	46,153
Students 23	45	75	30	55	0,5454545	54,545
Students 24	50	80	30	50	0,6	60
Sum	48,3333	78,3333	30	51,66666	0,5859184	58,591

From the calculation results in the table 5, the average value of N-Gain Scor is 58.59%. So it can be concluded that the development of cybernetic-based kalam material at Mts Negeri 3 Ogan Ilir is quite effective because this average value is between 56-75%. Then for the N-Gain Scor value of 0.58 this value is in the medium category. Then to find out the next test to strengthen the data on the effectiveness test results of the developed product, a normity test is carried out in the table 6:

Table 6 Normality Test Results

	Class	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Itself.	Statistic	df	Itself.
Student Learning	Pre-Test	,192	24	,022	,942	24	,178
Outcomes	Post-Test	,209	24	,008	,910	24	,035

a. Lilliefors Significance Correction

Based on table 6 the sig in the table is smaller than <0.05 . It can be concluded that the data is not normally distributed. Because the data is not normally distributed or inhomogeneous, the next test used is the Wilcoxon Signed Ranks Test. The Wilcoxon test is used to test and determine the effectiveness of the development of cybernetic-based kalam material in improving knowledge and skills in speaking Arabic. Conditions used: If the value of Sig. Indicates $\leq 5\%$ the hypothesis is acceptable. If the value of Sig. Shows $\geq 5\%$, the hypothesis is rejected.

Table 7 Results Ranks

	N	Mean Rank	Sum of Ranks
Negative Ranks	0 ^a	,00	,00
Positive Ranks Post Test – Pre-Test	24 ^b	12,50	300,00
Ties	0 ^c		
Total	24		

a. Post Test < Pre-Test

b. Post Test > Pre-Test

c. Post Test = Pre-Test

The following is an explanation of the results of the data table 7: Negative Ranks, a value of 0 indicates no decrease (subtraction) from the pre-test and post-test values. In the sense that the post-test value is greater. Positive Rank, there are 24 students who experience improved learning outcomes, can be seen from the average score. Ties, is the similarity of pre-test and post test scores. Ties here is 0 which means there is no equal value between pre-test and post-test.

Table 8 Effectiveness Test Results

	Post-Test – Pre-Test
With	-4,610 ^b
Asymp. Sig. (2-tailed)	,000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Based on table 8, the output of "Test Statistics" known to Asymp. Sig. (2-tailed) is worth 0.000. Since the value of 0.000 is less than ≤ 0.05 , it can be concluded that "Hypothesis accepted". This means that there is effectiveness in developing cybernetic-based Arabic kalam material in improving the knowledge and skills of Arabic speaking students in grade IX.1 at Mts Negeri 3 Ogan Ilir. The development of kalam material

based on a cybernetic approach using comic media in the learning process based on the results data above shows that there is an increase in student learning outcomes before and after the product in this study. There have been many previous researchers who discussed the development of *kalam* material using existing information media.

However, according to researchers, the development of natural materials using a cybernetic approach has not existed before. Looking at previous studies, the cybernetic approach is often used in matters of material that is understanding of information only, such as in Mathematics, Civic Education Islamic Education, etc. From the findings of the study, researchers saw an increase in good learning outcomes after combining technology and cybernetics in learning. Learning using a cybernetic approach emphasizes information technology processing, using video media, skype, and webcam.¹⁸ Therefore, the use of cybernetic approaches can be used in online learning or blended learning.¹⁹

A research fact states that learning that applies a cybernetic approach helps improve student learning outcomes and can meet completeness.²⁰ To strengthen the results of previous research, this research can be used as a contribution to scientific data on the development of cybernetic-based *kalam* material using comic media in improving speaking skill or related titles, as well as enriching the scientific treasures of Arabic learning both in terms of material innovation, media, and approaches and learning methods. The results of this research need to be further developed with more creative and interesting innovations. Because in this study with the limited ability of researchers that there are still many shortcomings that exist, both in terms of material and media that are not perfect so it is our collective task to continue to innovate in learning Arabic, especially on *kalam* material so that Arabic becomes a fun lesson and is not monotonous and tends to be boring among students.

¹⁸ Muhammad Arifin, Ayu Puspita Sari, and Adriawan Maulana Tama, "Implikasi Teori Belajar Sibernetik dalam Proses Pembelajaran dan Penerapan IT di Era Modern," *Prosiding Seminar Nasional Pendidikan Berkemajuan dan Menggembirakan (The Progressive & Fun Education Seminar) ke 2* (2017).

¹⁹ Diah Rizki Nur Kalifah, Nurul Hidayah, and Yuli Yanti, "Implikasi Teori Belajar Sibernetik terhadap Pembelajaran Daring dengan Menggunakan Google," *ELSE (Elementary School Education Journal): Journal of Elementary School Education and Learning* 6, no. 2 (2022): 500-512, <https://doi.org/10.30651/else.v6i2.13725>.

²⁰ Diah Rizki Nur Kalifah, Nurul Hidayah, and Yuli Yanti, "Implikasi Teori Belajar Sibernetik terhadap Pembelajaran Daring dengan Menggunakan Google," *ELSE (Elementary School Education Journal): Journal of Elementary School Education and Learning* 6, no. 2 (2022): 500-512, <https://doi.org/10.30651/else.v6i2.1372>

Conclusion

Arabic learning aims to achieve four language skills, namely listening, speaking, reading, and writing. It is recognized that each skill has the same level of difficulty, especially for non-Arab learners. However, listening skills are considered the most difficult, because communication processing occurs in a short time. Therefore, continuous innovation is needed, so that the *kalam* material can be more easily understood by students and *maharah kalam* learning is more fun. This research is one of the efforts that try to be done to make learning speaking easy and fun. That is by developing teaching material products with a cybernetic approach using Canva media. The cybernetic approach focuses on the process of processing information using technological devices, so it fits perfectly with the character of today's learners, who can adapt very quickly to technology. The findings of this study show that *kalam* material products using a cybernetic approach can successfully improve student learning outcomes. This research still has shortcomings that can be refined again through further research. This research applies only six steps out of the ten steps of the Borg and Gall research and development model. So that further research can be continued using all ten steps as a whole. Likewise, in terms of material can be developed for the type of language skills and carried out with a more integrated approach, covering all four Arabic skills. Furthermore, researchers can also develop cybernetic-based *kalam* material products by referring to the objectives of achieving the independent curriculum and prepared based on the structure of renewable teaching modules according to independent curriculum standards.

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Author Contributions Statement

KI contributes to carrying out research, from preparing instruments, data collection, and data analysis and making it an article dedicated to readers. IR, NU, IM

and ZA contribute to data analysis, data reduction, interpreting research results, improving grammar and language alignment.

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