

THE EFFECT OF APPLYING SYNECTICS MODEL ON STUDENTS ACHIEVEMENT IN SPEAKING

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ABSTRACT

This research employs an experimental design with the primary aim of determining the extent to which the application of the Synectics Model influences students' speaking abilities when supported by visual media. The study was conducted at SMK Telkom 2 Medan, situated at Jalan Halat No. 68, Kota Matsum II, Kec. Medan Area, Medan City. The population consisted of all eleventh-grade students (Perhotelan XI-1 and Perhotelan XI-2), totaling 22 students. The sample was divided into two groups: the control group, instructed through traditional lectures, and the experimental group, taught using the Synectics Model. The results revealed that, through the analysis of teaching and learning speaking, there was a significant impact of applying the Synectics Model on students' speaking skills when utilizing visual media, as indicated by t-calculation $>$ t-table ($3.323 > 1.682$). The study found that the overall percentage effect of implementing the Synectics Model on students' speaking competence using visual media was 41%, with the remaining 59% influenced by other factors.

Keywords: Synectics Model, Speaking Skills, Visual Media

ABSTRAK

Penelitian ini menggunakan desain eksperimental dengan tujuan utama untuk mengetahui sejauh mana pengaruh penerapan Model Synectics terhadap kemampuan berbicara siswa ketika dibantu dengan media gambar. Studi ini dilakukan di SMK Telkom 2 Medan, yang terletak di Jalan Halat No. 68, Kota Matsum II, Kec. Medan Area, Kota Medan. Populasi penelitian ini adalah semua siswa kelas sebelas (Perhotelan XI-1 dan Perhotelan XI-2), yang terdiri atas 22 siswa. Sampel dibagi menjadi dua kelompok: kelompok kontrol, yang menerima instruksi melalui ceramah tradisional, dan kelompok eksperimen, yang diajarkan menggunakan model synectic. Hasil penelitian menunjukkan bahwa dari analisis pembelajaran berbicara, dapat disimpulkan bahwa terdapat pengaruh signifikan penerapan Model Synectics terhadap kemampuan berbicara siswa dengan menggunakan media gambar, seperti yang ditunjukkan oleh perhitungan $t >$ t tabel ($3,323 > 1,682$). Ditemukan bahwa keseluruhan persentase efek penerapan Model Synectics terhadap kompetensi berbicara siswa dengan menggunakan media gambar adalah 41%, dengan sisanya 59% dipengaruhi oleh faktor-faktor lain.

Kata Kunci: Model Synectics, Kemampuan Berbicara, Media Gambar

INTRODUCTION

Language makes it simple for us to communicate with people wherever we are in the world. Given the significance of knowing how to speak English, this is undoubtedly highly useful and beneficial. The act of teaching English involves setting up the classroom in a way that promotes learning. The four skills of teaching English are speaking, writing, reading, and listening. Although these abilities have distinct meanings, they all aim to increase English creativity (Tridinanti, 2018).

Lestari et al., (2018) research reveals the reason behind high school students' lack of enthusiasm for learning English, particularly when it comes to speaking in class. Because they lack words, they feel unmotivated, and they are uncertain about how to pronounce words correctly, which makes them hesitant to talking English. The teacher's inappropriate usage of an inappropriate model when teaching speaking is another factor. Due to the fact that teaching English calls for the use of efficient teaching strategies, models, techniques, and activities to enhance speaking abilities.

Speaking is the capacity to articulate sounds through words in order to communicate ideas or thoughts. It makes a significant impact on pupils' improved communication skills. Speaking training can be conducted with classmates, relatives, and teachers who speak English since it is challenging for students to acquire speaking skills if they are not used to speaking frequently, which leaves them with very little ability to speak. The objective is to improve speaking fluency, vocabulary usage, sentence construction and English sentences structure. It also aims to teach auditory perception so that communications from other people may be easily understood (Darmuki et al., 2018).

Teaching speaking can be done in a variety of ways to get around this. Teachers need to come up with innovative ideas for their teaching-learning process in order to foster a welcoming environment, help students become more confident speakers, and pay close attention to and provide feedback on the speaking components. Instructors need to be able to use approaches or strategies that are appropriate and simple enough for students to understand in order to improve their mastery of them. Using the Synectics Model is one of them. Students who struggle with speaking English can benefit from this model (Gana et al., 2018).

The Synectics Model is a teaching strategy intended to spark students' imaginations and enable them to view familiar concepts in fresh ways. William J. J. Gordon and associates created the Synectics Model of Teaching in 1961. Using Synectics is a student-centered approach to education. The exploration of varied student thought and appreciation of the various possible opinions or answers that arise in the learning process are not limited by the development of thinking skills during the learning process. Thinking in terms of metaphors and analogies will aid students in making abstract ideas more relatable. Synectics is related to student learning, learning creativity, using technology in the classroom, and brain research. The Synectics Model has seven steps that need to be completed: substantive input, direct analogy, make story, comparing analogy, identify differences, exploration and analogy formulation (Ansari et al., 2022).

Based on the above description, the researcher conducted a study with the theme of the impact of using the Synectics Model on the speaking achievement of eleventh grade students of SMK Telkom 2 Medan which is located in Kecamatan Medan Area, Medan City, North Sumatera in the academic year of 2023/2024. The researcher expected that the teaching and learning process will help students become more proficient English speakers and engage in English speaking activities.

RESEARCH METHOD

The researcher used experimental methodology in this study. This study aims to investigate the effects of the Synectics Model on students' speaking abilities. This experimental research approach made use of two groups: the experimental and the control groups. The design would be figured out as follows:

Table 1. Research Design

Group	Pre-test	Treatment	Post-test
Experimental	√	Using Synectics Model with Picture	√
Control	√	Media	√

The population of this research was the eleventh grade students of SMK Telkom 2 academic year of 2023/2024 who consists of 22 students in 2 parallel classes Perhotelan XI-1 and Perhotelan XI-2.

In analyzing the data, some techniques were taken as follows:

- a) Scoring the students' performance.
- b) Listing the score into two tables for experimental and control group, and
- c) Calculating the total score post-test in experimental and control group. Using the Synectics Model, the following table can be used to determine the value of the percentage of the students' speaking ability
- d) Calculating mean score,
- e) Standard Deviation,
- f) Normality test and
- g) Calculating for the correlation product moment between with microsoft excel program.

RESULTS DATA ANALYSIS

This data was obtained through experimental research methods. This study included two groups, the experimental group and the control group. Prior to administering the treatment, the experimental group was first given the pre- test oral exam. The experimental group, using the Synectics Model, was then helped by visual picture media. Following treatment, a post-test was administered to the experimental group. The experimental group's student score was displayed in the following table:

Table 2. The Result of Pre-test and Post-test of Experimental Group

No	Student's Initial Name	Pre-test	Post-test
1	AIN	65	80
2	AN	55	60
3	AS	70	75
4	ADE	80	90
5	ARL	55	65
6	DA	60	80
7	ECS	55	65
8	FM	60	85
9	GVS	70	75
10	IBH	75	85
11	KHOS	60	75
12	LAS	70	75
13	MDA	60	85
14	MBS	60	85
15	MFH	70	85
16	MZA	85	90
17	NTL	70	70
18	NA	55	65
19	PZSP	60	75
20	RAR	75	85
21	RAP	70	75
22	SSAA	55	70
Total Score		1435	1695

Based on Table 2 above showing pre-test and post-test results from the experimental group, the lowest pre-test score was 55 and the highest pre-test score was 85. The lowest post-test score was 60, and the highest post-test score was 90.

Second, before administering the therapy, the control group received an oral pre-test. Then there was the control group, which was handled using the lecturing approach. After the therapy, the control group was given a post-test. The following table shows the students' scores from the control group:

Table 3. The Result of Pre-test and Post-test of Control Group

No	Student's Initial Name	Pre-test	Post-test
1	AIN	50	55
2	AN	55	60
3	AS	60	65
4	ADE	55	60
5	ARL	65	75
6	DA	75	80
7	ECS	65	70
8	FM	60	65
9	GVS	55	65
10	IBH	65	75
11	KHOS	55	65
12	LAS	60	80
13	MDA	70	75
14	MBS	55	65
15	MFH	55	65
16	MZA	65	75
17	NTL	60	70
18	NA	65	75
19	PZSP	60	70
20	RAR	60	75
21	RAP	65	70
22	SSAA	60	70
Total Score		1335	1525

Based on Table 3 above of pre-test and post-test results from the control group, the lowest pre-test score was 50 and the highest pre-test score was 75. While in the post-test, the lowest score was 55 and the highest score was 80. The following Table 4 was calculated using Tables 2 and 3:

Table 4. The Calculation Table of Post-test Experimental and Control Group

No	X ₁	X ₂	X ₁ ²	X ₂ ²	X ₁ .X ₂	X ₁ -X ₂
1	80	55	6400	3025	4400	25
2	60	60	3600	3600	3600	0
3	75	65	5625	4225	4875	10
4	90	60	8100	3600	5400	30
5	65	75	4225	5625	4875	-10
6	80	80	6400	6400	6400	0
7	65	70	4225	4900	4550	-5
8	85	65	7225	4225	5525	20
9	75	65	5625	4225	4875	10
10	85	75	7225	5625	6375	10
11	75	65	5625	4225	4875	10
12	75	80	5625	6400	6000	-5
13	85	75	7225	5625	6375	10
14	85	65	7225	4225	5525	20
15	85	65	7225	4225	5525	20
16	90	75	8100	5625	6750	15
17	70	70	4900	4900	4900	0
18	65	75	4225	5625	4875	-10
19	75	70	5625	4900	5250	5
20	85	75	7225	5625	6375	10
21	75	70	5625	4900	5250	5
22	70	70	4900	4900	4900	0
Total	1695	1525	132175	106625	117475	170

From table 4 above, the results obtained are:

a. Mean

$$\bar{X} = \frac{\sum X_1}{n} = \frac{1695}{22} = 77,05$$

$$\bar{X} = \frac{\sum X_2}{n} = \frac{1525}{22} = 69,32$$

b. Standard Deviation

$$S_1 = \frac{n_1(\sum X_1^2) - (\sum X_1)^2}{n_1(n_1 - 1)}$$

$$= \frac{22(132175) - (1695)^2}{22(22-1)}$$

$$= \frac{(2907850) - (2873025)}{22(22-1)}$$

$$= \frac{34825}{462}$$

$$= 75,38$$

$$= \sqrt{75,38}$$

$$= 8,68$$

From the results of the above calculations, it is found that Mean X_1 (Experimental Group) = 77,05 and Mean X_2 (Control Group) = 69,32. Then the standard deviation value X_1 (Experimental Group) = 8,68 and standard deviation X_2 (Control Group) = 6,60. Furthermore, the researcher calculates the normality test value, this test is to determine whether the sample data has been taken from a normally distributed population or not.

Table 5. The Calculation Table of Post-test Results of Experimental and Control Groups

No	X_1	F	S	Z_i	$F(Z_i)$	$S(Z_i)$	$F(Z_i)-S(Z_i)$
1	60	1	1	-1,96	0,02481	0,04545	0,021
2	65	3	2	-1,39	0,08266	0,09091	0,008
3	65		3	-1,39	0,08266	0,13636	0,054
4	65		4	-1,39	0,08266	0,18182	0,099
5	70	2	5	-0,81	0,20854	0,22727	0,019
6	70		6	-0,81	0,20854	0,27273	0,064
7	75	6	7	-0,24	0,40687	0,31818	0,089
8	75		8	-0,24	0,40687	0,36364	0,043
9	75		9	-0,24	0,40687	0,40909	0,002
10	75		10	-0,24	0,40687	0,45455	0,048
11	75		11	-0,24	0,40687	0,5	0,093
12	75		12	-0,24	0,40687	0,54545	0,139
13	80	2	13	0,34	0,63319	0,59091	0,042
14	80		14	0,34	0,63319	0,63636	0,003
15	85	6	15	0,92	0,82022	0,68182	0,138
16	85		16	0,92	0,82022	0,72727	0,093
17	85		17	0,92	0,82022	0,77273	0,047
18	85		18	0,92	0,82022	0,81818	0,002
19	85		19	0,92	0,82022	0,86364	0,043
20	85		20	0,92	0,82022	0,90909	0,089
21	90	2	21	1,49	0,93216	0,95455	0,022
22	90		22	1,49	0,93216	1	0,068

Based on the table 5, it showed that $L_o = 0,139$ and $L_t = 0,189$. It means that $L_o < L_t$ ($0,139 < 0,189$) is the data is form normal distributed population in experimental group. Furthermore, researchers calculated the product moment correlation between X_1 and X_2 :

Table 6. Correlation of Product Moment with Excel

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	77,04545	69,31818182
Variance	75,37879	43,56060606
Observations	22	22
Pooled Variance	59,4697	
Hypothesized Mean Difference	0	
df	42	
t Stat	3,32334	
P(T<=t) one-tail	0,000926	
t Critical one-tail	1,681952	
P(T<=t) two-tail	0,001851	
t Critical two-tail	2,018082	

According to the table 6 above, the value of with a significance value of 5% (0,05). Based on post-test data from the experimental and control groups, which included 22 students ($n = 22$). The value of $t\text{-table} = 1,682$ and $t\text{-calculation} = 3,323$. It demonstrated that $t\text{-calculation} > t\text{-table}$ ($3,323 > 1,682$). That is, H_0 was refused, but H_a was accepted. It may be concluded that using visual media to apply the Synectics Model had a substantial effect on the students' speaking skills.

CONCLUSION AND SUGGESTION

Conclusion

The conclusions of this research were taken from the analyzing of the data teaching and learning speaking, it can be concluded that there was an effect of applying the Synectics Model on the students' speaking skills by using picture media, as evidenced by the $t_{\text{calculation}} > t_{\text{table}}$ ($3,323 > 1,682$).

Suggestion

Based on the data collected in this study, the following recommendations should be made: students must be able to communicate in English and must have a vast variety of vocabulary in order to communicate effectively. As a result, it is advised that the Synectics Model be used to increase the quantity of vocabulary words. Because, according to the data analysis results, utilizing this technique in learning to speak was effective in expanding vocabulary.

REFERENCES

- Ansari, P., Samia, J. F., Khan, J. T., Rafi, M. R., Rahman, M. S., Rahman, A. B., Abdel Wahab, Y. H. A., & Seidel, V. (2022). Protective effects of medicinal plant-based foods against diabetes: a review on pharmacology, phytochemistry, and molecular mechanisms. *Nutrients*, 1–41.
- Darmuki, A., Andayani, A., Nurkamto, J., & Saddhono, K. (2018). Cooperative, Synectics, and CTL Learning Models toward speaking ability viewed from student's motivation. *Atlantis Press*. January, 1–6. <https://doi.org/10.2991/icigr-17.2018.18>
- Gana, M., Haryanto, & Salija, K. (2018). Teachers' strategies in teaching speaking (a case study of an English teacher in SMA Negeri 1 Toraja Utara). *Teachers' Strategies in Teaching Speaking*, 1–10.
- Lestari, H., Mahmud, M., & Salija, K. (2018). *The Ways To Overcome the Problems in Speaking English Encountered By the Students of Islamic Boarding School of*. 1–8. Doctoral Dissertation, Pascasarjana)
- Tridinanti, G. (2018). The correlation between speaking anxiety, self-confidence, and speaking achievement of undergraduate EFL students of private university in Palembang. *International Journal of Education and Literacy Studies*, 6(4), 35. <https://doi.org/10.7575/aiac.ijels.v.6n.4p35>