THE MULTIPLE INTELLIGENCES STRATEGY INTO STUDENTS' READING COMPREHENSION MASTERY AT ELEVENTH GRADE STUDENTS' OF SMA SWASTA HKBP SIDORAME

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This study deals with the effort of finding the effect of the Multiple Intelligences Strategy on the students' reading comprehension Mastery. This study was conducted by using experimental quantitative research. The objective of this study is to find out whether Multiple Intelligences Strategy affects students' reading comprehension mastery or not. There were 60 students used as the sample of this research who came from eleventh-grade students' of Accounting (AK) major in SMA Swasta HKBP Sidorame. The sample of this research was divided into two groups namely experimental group XI IPA consists 30 students and control group XI IPS consists of 30 students. The experimental group was taught by using Multiple Intelligences Strategy and the control group was taught by using Conventional Method namely Direct Instruction Strategy. The instrument used for collecting the data that was tested in the form of multiple choices with a total number of 25 questions. The test was divided into pre-test and post-test. The data was analyzed by using a t-test formula to see whether Multiple Intelligences Strategy significantly affects students' the reading comprehension or not. The result of the analysis shows that the t-observed (3.33) is higher than the t-table (1.671) with a level of significance (0.05) and the degree of freedom (df= 58). The result of the analysis shows that the hypothesis of the study is accepted. It can be concluded that Multiple Intelligences Strategy affects students' reading comprehension. In this study, the writer suggests that teachers should be able to use Multiple Intelligences strategies as an alternative in the teaching process for improving and creating enjoyable learning experiences, especially reading comprehension.

Keywords: Multiple Intelligences, Reading Comprehension, Strategy

INTRODUCTION

Language is incredibly important in human activities since it allows us to communicate with other people. It is used to convey their sentiments, goals, and ideas, either verbally or in writing. There are four abilities that anyone interested in learning English should be well-versed in, and this also applies when someone studies English. Learning English is becoming increasingly vital because it is an international language that is used to connect with people from all over the world and to help businesses grow. This globalisation era is full of challenges and competitions that necessitate skill in both spoken and written English. So, by studying English, we may make our aspirations a reality.

The goal of English language teaching in schools is to improve and broaden students' abilities in listening, speaking, reading, and writing. Reading is one of the most crucial basic skills taught in English. Students learn by absorbing information, developing critical thinking skills, recalling prior knowledge, and gaining new knowledge from the text they have read. Reading, according to Duffy (2009: 5), is knowing how individual skills and techniques can be combined to speed meaning acquisition. Students define reading and form their own opinions on why it is worthwhile to study based on their own experiences. They are driven to read when it empowers or enhances them. Although pupils have been learning English since elementary school, some of them still struggle to understand the text in junior high. Reading comprehension is the primary factor that contributes to the reading process.

Reading comprehension, as defined by Klingner (2007: 2), is "the process of constructing meaning by coordinating several complex processes that include word reading, word and world knowledge, and fluency." The phrase "teaching reading comprehension" has two meanings. It is unavoidably triage work: a unit or lesson requires pupils to master a specific piece of written information, yet some require instructor involvement to absorb the subject. The fundamental objective of the teacher in this meaning of teaching comprehension is the content; the reading comprehension training he or she delivers is merely a means to an end. Teaching

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reading comprehension is also useful for prevention, transfer, and generalisation. Darling-Hammond and colleagues (2005: 25).

Multiple intelligences theory provides a better method of thinking about schooling than general intelligence and test results. MI theory provides a place for expressing and promoting a broader range of abilities and skills while also contributing to the community. As general IQ scores show, education is not about distinguishing between individuals. Rather, education is concerned with how to integrate individuals' capacity for cultural advancement. As the old adage goes, "more heads are better than one." Multiple intelligences serve cultural purpose when numerous minds operate in a complimentary manner to advance a culture or community closer to its goals.

People in these diverse environments are allowed and encouraged to communicate and learn from one another by celebrating differences. MI theory promotes creativity by allowing a larger range of self-expressions and interpretations of experience to interact. Creativity emerges from an individual's engagement with cultural tools, artefacts, and information generated by previous and current generations. Individuals make diverse "senses" of the cultural meanings accessible in their environment (see book Tirni & Nokelainen, 2011: 127).

According to the writer's observations at SMA Swasta HKBP Sidorame, there are three issues with pupils' difficulties comprehending English text and failures in reading comprehension. The first issue is that pupils become bored throughout the educational process since the text provided by the teacher is lengthy and tough. It makes it difficult for them to understand and locate the key problem or concepts in the text. The second issue was that the pupils had difficulty comprehending and comprehending the content of the reading text because they lacked vocabulary and could not locate the meaning of the sentences. The students were not driven to improve their comprehension because the teacher taught them monotonously.

Based on the concerns presented above, it is expected that the Multiple Intelligences technique will aid students in their learning process. Because these tactics include a variety of activities, this theory is recommended for application in the classroom. Furthermore, in their learning process, a method that considers the kids'

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intelligence is applied so that the activities can fulfil the needs of each student in fun learning. Multiple intelligences hypothesis, as defined by Gardner in Abdulkader et al (2009: 676), is one of the most enduring theories in the world of education today. Gardner opposes the concept of a singular intellect, arguing that "Human Intelligence" refers to a wide range of human talents. Intelligence is the ability to identify and solve issues as well as generate innovation. Gardner's concepts demonstrate that kids can learn in a variety of ways. As a result, a variety of approaches and activities are required. Teachers that use the Multiple Intelligences Strategy may have a favourite teaching style. Using a variety of teaching styles and tactics will aid in meeting the needs of the classroom's diverse students. These teaching methods and strategies should be tailored to the various skills and attitudes of pupils.

METHOD

The research method used by the researcher in this study was experimental quantitative research. It means that to collect the data two groups were used. They were the experimental group and control group. The experimental group was the group that received treatment by applying Multiple Intelligences Strategy, while the control group was the group that did not receive treatment but it is treated by using a conventional way namely Direct Instruction Strategy. The experimental group was conducted by applying two randomized groups, pre-test, and post-test design. The population of this research was taken from the eleventh-grade students of SMA Swasta HKBP Sidorame. The sample was students of class XI-IPA as an experimental group and XI-IPS as a control group. Each group consists of 30 students.

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FINDING AND DISCUSSION

Following the collection of data, the author computed the mean score of the experimental and control groups in pre-test and post-test. The following table shows the results of the pre-test in the experimental and control groups;

Table 1.1

	Experimer	ntal Group	Control Group		
No	Initial Name	Pre – Test (X1)	Initial Name	Pre – Test (Y1)	
1	LZS	80	EM	60	
2	HP	68	SS	48	
3	AT	76	FSN	56	
4	DLG	72	SSM	52	
5	SLS	56	RT	48	
6	DAT	64	IRLB	64	
7	КР	60	NS	52	
8	NS	60	EG	72	
9	BLG	56	CMS	52	
10	BM	64	RMS	72	
11	DRS	64	FKLT	56	
12	LP	68	SOT	60	
13	ES	68	FFM	60	
14	ERP	64	ISMP	56	
15	LAT	64	IM	48	
16	SS	68	JHT	72	
17	IHLG	64	GRS	56	
18	ERFS	76	BJS	68	
19	MFP	80	SSM	60	
20	GM	72	RLG	60	
21	MS	52	SNS	56	
22	BS	76	JIP	60	

The Score of Pre-test in Experimental and Control Group

23	MS	68	KP	64
24	AS	60	RS	40
25	CGP	56	ESM	56
26	DRS	64	TPS	60
27	SDSS	56	MG	52
28	NLM	68	MJAP	64
29	STS	64	NDP	40
30	EHS	60	SM	52
	Total	1968		1716
	Mean	65,6		57,2

From the data above, the calculation of mean score of pre-test in experimental group is:

$$M = \frac{\sum X1}{N}$$
$$M = \frac{1968}{30}$$

M = 65.6

The total score of pre – test in experimental group is 1968 and mean score is 65.6. It is considered low.

The calculation of the mean score of pre-test in control group is:

$$M = \frac{\sum Y1}{N}$$
$$M = \frac{1716}{30}$$
$$M = 57,2$$

The total pre-test score in the control group is 1716, and the mean pre-test score is 57,2. It is regarded as extremely low. According to the calculation above, the students' reading comprehension level is very low.

The writer then applied the Multiple Intelligences Strategy to the experimental group as the following phase. The writer taught the learner utilising the Multiple Intelligences Strategy in this stage. The control group is taught using a traditional method known as Direct Instruction Strategy. The writer then administered the posttest to both groups, who received the same test. The post-test results for the experimental and control groups are presented in the table below;

Table 1.2

	Experimer	ntal Group	Contro	l Group
No	Initial Name	Post – Test	Initial Name	Post – Test
		(X2)		(Y2)
1	LZS	92	EM	68
2	HP	84	SS	68
3	AT	84	FSN	72
4	D LG	88	SSM	68
5	SLS	76	RT	64
6	DAT	84	IRLB	80
7	КР	84	NS	68
8	NS	84	EG	84
9	BLG	76	CMS	64
10	BM	88	RMS	80
11	DRS	76	FKLT	68
12	LP	76	SOT	72
13	ES	88	FFM	80
14	ERP	80	ISMP	68
15	LAT	84	IM	64
16	SS	80	JHT	80
17	IHLG	80	GRS	72
18	ERFS	92	BJS	80

The Score of Post-test in Experimental and Control Group

19	MFP	92	SSM	76
20	GM	92	RLG	72
21	MS	72	SNS	80
22	BS	92	JIP	76
23	MS	88	КР	80
24	AS	84	RS	52
25	CGP	76	ESM	72
26	DRS	84	TPS	72
27	SDSS	76	MG	64
28	NLM	80	MJAP	76
29	STS	84	NDP	56
30	EHS	80	SM	72
	Total	2496		2148
	Mean	83,2		71,6

From the data above, the mean of post – test experimental group is:

$$M = \frac{\sum X^2}{N}$$

$$M = \frac{2496}{30}$$

M = 83,2

The total score of experimental group is 2496 and the mean score is 71,6, it is considered high.

The mean score of students in control group is:

$$M = \frac{\sum Y2}{N}$$
$$M = \frac{2148}{30}$$

M = 71,6

The total score of students in control group is 2148 and the mean score is 71,6. It is considered still low.

Students' scores in both groups rise, but the mean rise in the experimental group is more than that in the control group. The total score of the pre-test in the experimental group is 1968, with a mean score of 65.6, while the total score of the post-test is 2496, with a mean score of 83.2. While the overall score of the pre-test in the control group is 1716 with a mean score of 57.2, the total score of the post-test is 2148 with a mean score of 71,6.

The t-Test method is used to calculate the difference between students in the experimental and control groups, as well as whether utilising the Multiple Intelligences Strategy has a significant influence on students' reading comprehension;

No	Initial	Pre-	Post-	Deviation	Square	dx = d-	dx ²
	Name	Test	Test		of	mx	
					deviation		
		X 1	X ₂	d=x2-x1	d²		
1	LZS	80	92	12	144	-5,6	31,36
2	HP	68	84	16	256	-1,6	2,56
3	AT	76	84	8	64	-9,6	92,16
4	DLG	72	88	16	256	-1,6	2,56
5	SLS	56	76	20	400	2,4	5,76
6	DAT	64	84	20	400	2,4	5,76
7	KP	60	84	24	576	6,4	40,96
8	NS	60	84	24	576	6,4	40,96
9	BLG	56	76	20	400	2,4	5,76
10	BM	64	88	24	576	6,4	40,96
11	DRS	64	76	12	144	-5,6	31,36
12	LP	68	76	8	64	-9,6	92,16
13	ES	68	88	20	400	2,4	5,76
14	ERP	64	80	16	256	-1,6	2,56
15	LAT	64	84	20	400	2,4	5,76

Table 1.3 The Calculation of Experimental Group

16	SS	68	80	12	144	-5,6	31,36
17	IHLG	64	80	16	256	-1,6	2,56
18	ERFS	76	92	16	256	-1,6	2,56
19	MFP	80	92	12	144	-5,6	31,36
20	GM	72	92	20	400	2,4	5,76
21	MS	68	88	20	400	2,4	5,76
22	BS	76	92	16	256	-1,6	2,56
23	MS	68	88	20	400	2,4	5,76
24	AS	60	84	24	576	6,4	40,96
25	CGP	56	76	20	400	2,4	5,76
26	DRS	64	84	20	400	2,4	5,76
27	SDSS	56	76	20	400	2,4	5,76
28	NLM	68	80	12	144	-5,6	31,36
29	STS	64	84	20	400	2,4	5,76
30	EHS	60	80	20	400	2,4	5,76
	Score	1968	2496	528	9888		595,2
	Mean	65,6	83,2	17,6			

Table 1.4

The Calculation of Control Group

No	Initial	Pre-Test	Post-	Deviation	Square	dx = d-	dx ²
	Name		Test		of	my	
					deviation		
		¥1	¥2	d=y2-y1	d²		
1	EM	60	68	8	64	-6.4	40,96
2	SS	48	68	20	400	5,6	31,36
3	FSN	56	72	16	256	1,6	2,56
4	SSM	52	68	16	256	1,6	2,56
5	RT	48	64	16	256	1,6	2,56
6	IRLB	64	80	16	256	1,6	2,56

7	NS	52	68	16	256	1,6	2,56
8	EG	72	84	12	144	-2,4	5,76
9	CMS	52	64	12	144	-2,4	5,76
10	RMS	72	80	8	64	-6.4	40,96
11	FKLT	56	68	12	144	-2,4	5,76
12	SOT	60	72	12	144	-2,4	5,76
13	FFM	60	80	20	400	5,6	31,36
14	ISMP	56	68	12	144	-2,4	5,76
15	IM	48	64	16	256	1,6	2,56
16	JHT	72	80	8	64	-6.4	40,96
17	GRS	56	72	16	256	1,6	2,56
18	BJS	68	80	12	144	-2,4	5,76
19	SSM	60	76	16	256	1,6	2,56
20	RLG	60	72	12	144	-2,4	5,76
21	SNS	56	80	24	576	1,6	2,56
22	JIP	60	76	16	256	1,6	2,56
23	КР	64	80	16	256	1,6	2,56
24	RS	40	52	12	144	-2,4	5,76
25	ESM	56	72	16	256	1,6	2,56
26	TPS	60	72	12	144	-2,4	5,76
27	MG	52	64	12	144	-2,4	5,76
28	MJAP	64	76	12	144	-2,4	5,76
29	NDP	40	56	16	256	1,6	2,56
30	SM	52	72	20	400	5,6	31,36
	Score	1716	2148	432	6624		313,6
	Mean	57,2	71,6	14,4			

Thus, from the data, it can know that:

$$Mx = 17,6$$
 $Dx^2 = 595,2$

My = 14,4 Dy² = 313,6

Ny = 30

Further, the writer applied that t-test formula as follows :

$$t = \frac{Ma - Mb}{\sqrt{\frac{dx + dy}{nx + ny - 2}\left(\frac{1}{nx} + \frac{1}{ny}\right)}}$$
$$t = \frac{17,6 - 14.4}{\sqrt{\frac{595,2 + 313,6}{30 + 30 - 2}}\left(\frac{1}{30} + \frac{1}{30}\right)}$$
$$t = \frac{3,2}{\sqrt{\frac{908,8}{58}\left(\frac{2}{30}\right)}}$$
$$t = \frac{3,2}{\sqrt{15,66}(0.06)}$$
$$t = \frac{3,2}{\sqrt{0.93}}$$
$$t = \frac{3,2}{0.96}$$

t = 3.33

After entering the data into the t-test formula above, the tobserved is 3,33 and the t-table is 1.671. The t-observe (1.671; p= 0.05) is greater than the t-table. This suggests that employing the Multiple Intelligences Strategy has a considerable impact on students' reading comprehension in narrative content.

The hypothesis should be tested to see if it is accepted or rejected. If t-table is observed, Ha (alternative hypothesis) is accepted. The t-observed is 3.33 and the t-table is 1.671 when the score is calculated using a t-test for the degree of freedom 58 (df=Nx+ Ny - 2) at the level of significance 0.05. The t-test computation revealed that the t-observe is more than the t-table, as shown below:

t-obs > t-table (α = 0.05) with df = 58

3.33 > 1.671 ($\alpha = 0.05$) with df = 58

Based on the calculations, it is possible to conclude that applying the Multiple Intelligences Strategy has a considerable effect on students' reading comprehension mastery. It denotes that the alternative hypothesis (Ha) has been accepted. According to the data analysis, the experimental and control groups' scores were different. The experimental group's mean post-test score (83.271.6) was greater than the control group's. The differences, however, were examined using a t-test. The t-test computation revealed that at = 0.05, df=58, the t-observed value (3.33) was greater than the t-table value (1.671). The differences show that the Multiple Intelligences Strategy has a considerable impact on reading comprehension mastery.

CONCLUSION

After analyzing and interpreting the data statistically, the writer found that Multiple Intelligences Strategy affects the students' reading comprehension Mastery. (1) Multiple Intelligences strategies used interesting learning activities, so the students were motivated in reading and had positive behavior in the reading learning process. The Multiple Intelligences strategies can be used as one of the alternative strategies, which combines students' intelligence in solving the reading comprehension questions. The strengths of Multiple Intelligences strategies are: make the students learn by doing, motivate the students' learning, avoid boredom, help the students to be active, creative, independent, and responsible in learning, and help the teachers to be creative planners in the learning process. (2)The mean score of the students who were taught by applying the Multiple Intelligences Strategy (83.2) is higher than the mean score of students who were taught by applying the conventional method namely the Direct Instruction Strategy (71.6) and the t-observed (3.33) is higher than t-table (1.671) at the level of significance of 0.05 of a two-tailed test. It means that Ha is accepted. (3) There is a significant effect of using the Multiple Intelligences Strategy on students' reading comprehension in eleventh-grade Students in SMA Swasta HKBP Sidorame

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