

Cooperative Learning Model toward a Reading Comprehensions on the Elementary School

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Abstract

The purposes of this research are: (1) description of reading skill the students who join in CIRC learning model, Jigsaw learning model, and STAD learning model; (2) finding out the effective of learning model cooperative toward a reading comprehensions between the students who have high language logic and low language logic; and (3) finding out the interaction between the use of the learning model and the language logic in influencing the reading comprehensions. The try out group was given a special treatment of respectively cooperative learning model : CIRC, Jigsaw, and STAD. The try out group was divided into two categories, students who had high language logic and those who had low language logic. The population of the study was the fifth grade elementary school student in Central Java. Students taken by stratified random sampling technique. After the data was collected, they were presented in form of tables and graphs, which were then analyzed with variant analysis. There are three primary in the study. *First*, the reading skill of the students who joined in CIRC learning model is better than those who joined in Jigsaw or STAD model. *Second*, the reading skill of the students who have high language logic is better than low language logic. *Third*, there are interactions between the use of learning model and the language logic in influencing reading comprehensions.

Key Word : cooperative learning model, reading comprehension, language logic.

1. Introduction

Reading is a skill which becomes the window of knowledge. Almost all of knowledge is understood by reading. Therefore, science and technology developments demand the creation of society with reading hobbies. This society will obtain knowledge and new insights faster which will increase their intelligence so they'll be more capable to answer life challenges in the future (Rahim, 2003). Related to reading skill, Indonesian society could be said as a society who doesn't have good reading habit and culture, so their reading skill is not sufficient. This Indonesian society's lack of reading skill is one of the evidences from the low reading hobby or skill level of Indonesian students. As Asian Weeks (2009) has conveyed the fact in the field collecting shows that advanced country societies are signed by the development of reading culture. In contrary, the developing countries are marked by the low reading culture. This low reading culture is caused by some factors, such as student's weak motivation, the lack of coordination among teachers, and especially the lack of analysis at student's requirements in composing reading learning material (Alwasilah, 2000). Student's ability to comprehend literary aspect is actually quite good, but when they're asked to apply reading comprehension, these students are indolent to perform it and experience difficulties. As well as what Sumardi (2000) explained that the time provided for literary learning has spent to explain and memorize grammar literary principles.

Related to that condition, it is needed to do experiments in reading skill learning process by learning model which based on active, creative, effective, and fun. That is cooperative learning model. This cooperative learning model is developed in particular for elementary school students because it gives motivations and hopes for students by giving the learning that's fun, repetitive, and suits the needs. Besides, for children this age, the role of peer group means a lot. He really longs for his peer group's acceptance. Either in behavior performance or in self expression, especially language, he tends to imitate his peer group (Iskandarwassid and Sunendar, 2009). This condition harmonizes with cooperative learning model's breath which especially based on cooperation in its learning. Cooperative learning model has philosophical base that cooperation will produce collective energy which called synergy. This synergy will result in something extraordinary. In educational world, this synergy is applied in learning community (Johnson, & Johnson, 1994; Slavin, 1995; Joyce, 2009).

The main topic studied in this research is the effect of cooperative learning model of CIRC, Jigsaw, and STAD toward reading skill viewed from language logic ability for elementary school students in National Education Department of Central Java Province. While the main problems formulated: (1) Are there any differences in reading skill among the student groups who study with cooperative learning model type: CIRC, Jigsaw, and STAD? (2) Are there any differences in reading skill among the student groups who have high language logic ability and those who have low language logic ability? (3) Are there any interactions between cooperative learning model type and language logic ability application in influencing reading skill?

The purposes of this research are: (1) Finding out the differences in reading skill among the student groups who study with cooperative learning model type: CIRC, Jigsaw, and STAD, (2) Finding out the differences in reading skill among the student groups who have high language logic ability and those who have low language logic ability. (3) Finding out the interactions between three cooperative learning model types and language logic ability application in influencing reading skill.

2. Review of Related Literature

2.1 Reading Skill

As one of language skills, reading skill is a very unique skill and acts as the main communication tool for human life, also takes an important role in natural science development (Iskandarwassid and Sunendar, 2009). It is said to be unique because not all men, although they already had reading skill, are able to develop it to be a tool to expand himself, or even make it as a culture for himself. It is said as the main communication tool because reading is an effective and efficient communication media. Likewise it is said to hold an important role for natural science development, because the biggest percentage of science transfers is done by reading. Kridalaksana (2009) defined reading as digging information from literature, either in text form or in drawing or chart, or the combination from the mentioned forms. Reading is a skill to distinguish and comprehend written language in the form of graphic symbols sequences and its alterations to become speech that has meaning in form of silent comprehension or loud pronounce. Kirby (2007) defined reading is a process where someone comprehends the read text, with what purpose, why it's taught, and why it's considered. Klein (1991) explained that reading includes (1) reading is a process; (2) reading is strategically; and (3) reading is an interactive.

Related to reading comprehension, the experts give some skill range in reading comprehension. Crawley & Mountain (1995) stated it as a thinking process; reading includes word introduction activity, literal comprehension, interpretation, critical reading, and creative comprehension.

2.2 Cooperative Learning Model

The philosophical base of cooperative learning is cooperation will produce collective energy which called synergy. This synergy will result in something extraordinary. In educational world, this synergy is applied in learning community (Johnson & Johnson, 1994; Slavin, 1995; Joyce, 2009).

Cooperative Learning Model Cooperative Integrated Reading and Composition (CIRC), this model was firstly explained by Madden, Slavin & Stevens (1986) in their writing *Cooperative Integrated Reading and Composition: Teacher Manual*. In this book basically explained the steps and how to apply this CIRC model in class learning. At the same year Stevens and Slavin undergone the research entitled *The Effect of Cooperative Integrated Reading and Composition (CIRC) on Academically handicapped and nonhandicapped students' achievement, attitudes, and metacognition in Reading and Writing*, in *Elementary School Journal* (1986). Furthermore, Hertz-Lazarowitz, Ivory & Calderon (1993) undergone the research entitled *The Bilingual Cooperative Integrated Reading and Composition (CIRC) Project in Ysleta Independent School District: Standardized Test Outcomes*. CIRC cooperative learning model is cooperative model which made especially for language learning. This suits its name which is comprehensive program to teach writing and reading in elementary school classes, besides the higher grades (Slavin, 1995). Because it has integrative characteristic, so in its application always connecting these two types of language skills.

Jigsaw Cooperative Learning Model, this model was firstly introduced by Aronson, et al. (1978). Moskowitz, et al. (1985) wrote this model with the topic *Evaluation of Jigsaw, a Cooperative Learning Technique*. Furthermore Jigsaw learning model is also explained by Mattingly & Vansickle (1991) with the topic *Cooperative Learning and Achievement in Social Studies: Jigsaw II*. In this Jigsaw cooperative learning model type, the students study in heterogeneous group with the members of 4 to 6 people, which called home team. Every group member is responsible for the mastering of the part from learning material which assigned for him, then teaches that part to the other group members. Every group member who assigned in mastering that material part is called **expert**.

Cooperative Learning Model Student Teams Achievement Division (STAD), this model is the oldest and simplest form of cooperative learning. Firstly introduced in early 1978 by Slavin in his writing in *Journal of Research and Development in Education* (1978) with the topic *Student Teams and Achievement Divisions*. Furthermore, it is developed by Frantz (1979) in his research entitled *The Effect of The Student Teams Achievement Approach in Reading on Peer Attitudes*. STAD is one of the simplest cooperative learning models and the most used model by teachers in advanced world, which used from second grade until eleventh grade (Slavin, 1995).

2.3 Language Logic Ability

Logic precise reasoning science. This means that reasoning science is trying to find out and explain principles upon thinking activity which could be valued, either good or bad, right or wrong, or make sense or make nonsense (Leonard, 1967). Meanwhile, Copi (1978) explained that logic is study about methods and principles which used to distinguish the right reasoning and the wrong reasoning. The concept of logical form is the core of logic. The concept states that the validity of an argument is determined by its logical form, not by its content. Logic is the main tool to present and to reason the knowledge. Particularly it is needed to have ability to do reasoning formal logically. The advantage of using formal logic language in artificial intelligence is that language presents limited and exact thing (Puncta, 2005).

This intelligence's application helps connecting between knowledge and comprehension owned with new information and also explains how that connection happen (Bellanca, 2011). Generally language logic is grouped into two; they are inductive logic and deductive logic. Inductive logic is the logic which starts from the particular or specific towards a general conclusion (D'Angelo, 1978). Generalization, analogy (either inductive or declarative), and causal relationship are the parts of inductive logic.

3. Research Methods

The design applied in this research is factorial 3×2 (Ary and Razavieh 2005). This research is held in fifth grade Elementary School in National Education Department of Central Java Province at the even semester academic year 2014/2015, which all at once also becomes population. The chosen samples are 12 Elementary School for the experiment. The applied sampling technique is multi stage area random sampling (province area, Regency area, and sub district area: School Cluster). From 35 regencies in Central Java it is randomly chosen 4 regencies, then from the chosen 4 regencies each randomly taken 3 sub districts, then in each sub districts taken 1 Elementary School. The chosen Elementary School in every sub district and in every regency are research Elementary Schools; thereby the number of research Elementary Schools gained is 12 elementary school which spread in 4 regencies and 12 sub districts. The chosen 12 elementary school are SD Muhammadiyah 1, SD Demaan 03, SD Pedurangan Lor 1, SD Petompon 07, SD Pandean Lemper 07, SD Mungkid 02, SD Mertoyudan 02, SD Borobudur 01, SD 01 Wonorejo, SD 01 Pompong, SD 01 Pandeyan. From those 12 Elementary Schools that become research sample, 4 schools for CIRC model, 4 schools for Jigsaw model, and 4 schools for STAD model.

4. Results and Discussion

Table 1. The data collection of reading skill for students

LEARNING MODEL (A)		LANGUAGE LOGIC ABILITY (B)		Sum
		High (B1)	Low (B2)	
CIRC (A1)	N	58	64	122
	$\sum X$	5010	4684	9694
	Min.	64	56	56
	Max.	98	92	98
	\bar{X}	86.3793	73.1875	79.4590
	Mo	90	80	80
	Me	88	74	80
	S	8.7093972	9.935534	11.47628
	Var.	75.8536	100.2817	131.7049
	Range	64-98	56-92	56-98
$\sum X^2$	437084	349128	786212	
JIGSAW (A2)	N	63	61	124
	$\sum X$	5056	4462	9518
	Min.	62	54	54
	Max.	98	92	98
	\bar{X}	80.2540	73.1475	76.7581
	Mo	80	80	80
	Me	80	74	78
	S	10.289312	10.529065	10.962145
	Var.	105.8699	110.8612	120.1686
	Range	62-98	54-92	54-98
$\sum X^2$	412328	333036	745364	
STAD (A3)	N	59	59	118
	$\sum X$	4726	4288	9014
	Min.	62	56	56
	Max.	98	90	98
	\bar{X}	80.1017	72.6780	76.3898
	Mo	80	72	76
	Me	80	72	76
	S	10.268289	10.107083	10.80759
	Var.	105.4378	102.1531	116.8040
	Range	62-98	56-90	56-98
$\sum X^2$	384676	317568	702244	
Sum	N	180	184	
	$\sum X$	14792	13434	
	Min.	62	54	
	Max.	98	92	
	\bar{X}	82.1778	73.0109	
	Me	82	74	

	S	10.170148	10.163682	
	Var.	103.4319	103.3004	
	Range	36	38	
	$\sum X^2$	1234088	999732	

The Differences among Students Who Participate in CIRC, Jigsaw, and STAD Learning Model

The students who learn with CIRC learning model are more effective than the students who learn with Jigsaw or STAD. It is proved by the average grade of student's reading skill with CIRC model is 79.46 which is significantly higher than the average grade of student group who learns with Jigsaw learning model, with the average grade 76.76 or STAD learning model with the average grade 76.40. This happens because the students who participate in learning with CIRC model can develop their text comprehension result by compose it back in form of outline writings. Thereby, the comprehension is not temporary, but it is in-depth or even productive comprehension (Leak, 2005). This writing result is then corrected among friends in their small group (Hurry & Sylvia, 2007). The student whose comprehension is inaccurate can be perfected by his friends in this correcting-each-other group. This research result strengthens the research by Stevens and Slavin (1986) and Hertz-Lazarowitz, et al (1993), each research shows that CIRC cooperative learning model is very excellent to improve reading and writing ability.

In language using, reading skill and writing skill are two things that related tightly. Both are active skills. Reading skill is receptive active from written source, while writing skill is writing productive active, so both of them cannot be parted with writings (Tarigan, 2004). Both skills are related and support each other. Both of them are different but correlative, there is no reading skill without writing; there's no writing skill without reading. There are effects from reading skill towards other language skills; they are writing, speaking, and syntax arrangement (Elley, 1991). Besides, reading also indirectly improves vocabulary mastering, and this vocabulary mastering is very useful for writing skill (Nagy & Herman, 1987). This firm relationship between reading and writing is also showed by the research result of Hafiz & Tudor (1989) in England and Pakistan and also Robb & Susser (1989) in Japan which basically state that there is positive influence of reading skill for pre-college students towards writing skill. Those whose reading skill is good would be good writers by the time they enter college.

Reading skill is receptive skill, in order to dig deeper, in rhythm productive skill is needed, that is writing skill (Leak, 2005). Thereby, it is proved that Indonesian reading skill among the Elementary School students who learn with CIRC cooperative learning model is better than the one with Jigsaw model, it is caused by the application of CIRC model which integrates reading and writing skill, while there is no integration in Jigsaw model. Jigsaw contains in-depth study about certain topics by every member of home team, then this group members form a new group. After each of them comprehends their parts, they come back to their home team and explain to their home team colleague (Arend, 1997). There are some weaknesses that researcher find in the field, that is not all of the member of expert team completely master their part of the topics, because not the entire member has the same capability. The consequence is the member of this group doesn't thoroughly explain to the other member of home team. The topic which is mastered by home team member with good mastering would bear good result to other members, while topic which isn't mastered completely by home team member would bear poor result to other members.

The experiment result shows that there are differences between student group's reading skill who participates in CIRC learning model and STAD learning model. This happens because student group who participates in CIRC learning model could develop their reading comprehension result by compose it back in form of outline writings. Thereby, the comprehension is not temporary, but it is in-depth or even productive comprehension. Meanwhile, in STAD model, in-depth material study is done by catechizing in that cooperative group. It is true that in-depth material study by catechizing is better than the traditional way (Slavin, 1978), but this comprehension through catechizing is actually easy to forget because it is as if merely a recitation (Myers, 2005: xi). This is different with the integration of reading and writing which is applicative that will settle in mind for a long time.

Indonesian reading skill of student group who participates in cooperative learning model type Jigsaw is as good as the student group who participates the cooperative learning model type STAD. The research result proves that there are no significant differences between reading skill of the student group who participates in Jigsaw learning model and STAD learning model. It is proved by the average grade of reading skill of the students who learn with Jigsaw learning model, with the average grade 76.756 which in fact does not significantly differ compared to the average grade of the student group who learns with STAD learning model with the average grade 76.390. After further experiment is done, the difference is not significant.

In fact, either Jigsaw or STAD is innovative model which can be applied to improve reading skill (Johnson & Johnson, 1994; Slavin, 1995; Joyce, 2009), even National Reading Panel USA (2000) has recommended Jigsaw and STAD cooperative model as ones of reliable models to improve reading skill. However either Jigsaw or STAD model, as early cooperative learning models, still has conspicuous weaknesses. Jigsaw model for

example, requires every group members to have good and evenly distributed capability to master the material well, in order to be able to explain properly to other members of the group (Mattingly & Vansickle, 1991). Because every member has to take turns to explain material in their charge to other group members. Of course the evenly distributed capability of students is hard to be materialized. It means that if there is one of the members who cannot explain his part properly, the consequence is the other members explained by would less comprehend the material.

Meanwhile, STAD model is very good to improve mathematics learning result, because STAD is initially designed for mathematics. As stated by Slavin (1978), STAD is one of the simplest cooperative learning models and used the most by teachers in advanced world, and it has been applied from the second grade to eleventh grade, particularly for mathematics learning. However in further development, STAD is also developed for reading skill learning, as done by Frantz (1979) in his research titled *The Effect of The Student Team Achievement Approach in Reading on Peer Attitudes*. At the time, the application of STAD on reading skill showed good result compared to conventional model. But it needs to be understood that reading skill does not only need some questions that have to be answered by group or individual in group just like the main characteristics of STAD, because this reading comprehension skill consists of five levels, they are words introduction, lateral comprehension, interpretative comprehension, critical comprehension, and creative comprehension. The answer to the question is not always text-book, but more than that, it needs interpretative power, its own criticality, and the creativity of group members.

The data analysis of research result shows that STAD model has matching tendency for words introduction and lateral comprehension level, and is not good for interpretative, critical, and creative comprehension. It is proved by the acquired reading skill grade on the subject words introduction is 19.03 (87% from maximum grade 22), the subject lateral comprehension is 18.46 (92% from maximum grade 20). On both of these subjects, the percentage of acquired grade is very excellent. It differs from reading skill grade on the subject interpretative comprehension which is 14.32 (72% from maximum grade 20), critical comprehension which is 13.492 (67% from maximum grade 20), and creative comprehension which is 11.220 (62% from maximum grade 18). This means the percentage of acquired grade is not good enough compared to the subject words introduction and lateral comprehension.

The Difference of Reading Skill between Students Who Have High Language Logic and Low Language Logic

The reading skill of student group who has high language logic is different with the students who have low language logic. The difference is the average grade of the students who have high language logic as much as 82.18 is better than the average grade of student group who has low language logic ability as much as 73.01. This research result is relevant with the research by Ansari (1997) which concluded that the verbal analogy ability of the students who learn with integrated learning is better than the students who learn with separated learning. This research result also describes that integrated learning has more influence than separated learning in improving the verbal analogy ability of college students. Thereby, so to speak, verbal ability can be improved with integrated learning.

The Interaction between the Application of the Three Learning Models and Language Logic Ability in Influencing Reading Skill

The interaction between model application and language logic ability is found in the data analysis. After variance analysis is done, the interaction between both actually happened. This is showed by the existence of the profile of learning model and language logic ability variables which is not parallel as shown in the following graph.

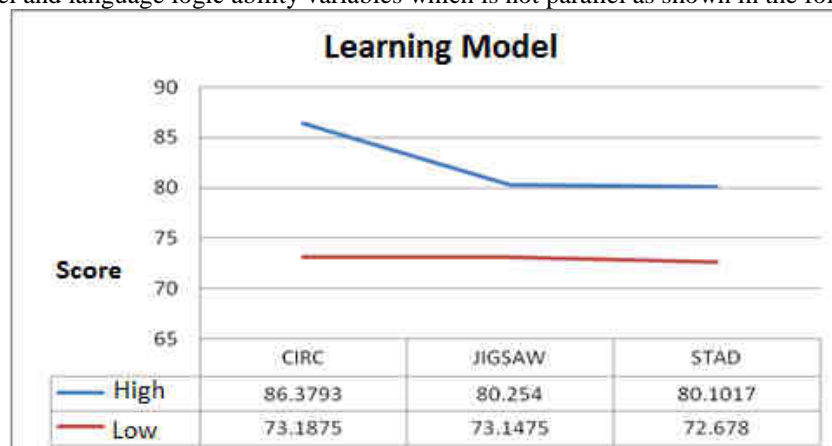


Figure 1 The Interaction Cooperative Learning Models and Language Logic Ability in Influencing Reading Skill

This indicates that interaction is found in both variables. If there is no interaction, the profile of learning model and language logic ability will surely show parallel lines. For example, if CIRC model is more effective than Jigsaw and STAD to improve the reading skill of student group whose logic ability is high, that should mean CIRC would be more effective to improve the reading skill for student group whose logic ability is low. But the fact this is not what happens, because CIRC model are only effective to be applied on the students who have high language logic ability (86.38) compared to the application of Jigsaw and STAD model on the students whose logic ability is high (80.25 and 80.10). Meanwhile, for the students whose language logic ability is low, CIRC learning model (73.19) is not more effective than the application of Jigsaw model (73.15) or STAD model (72.68).

The reading skill average grade of the student group who has high language logic ability with the application of CIRC learning model is better than the reading skill average grade of student group who participates with Jigsaw learning model. This happens because high logic is highly required by CIRC model in developing writing comprehension into written text. This development of the written text as the result of reading comprehension supports high level comprehension a lot in order not to forget easily (Parker, 1993). Logical thinking ability with language is an important asset for reading comprehension (White, 2004). Logical thinking is a basic asset to facilitate comprehending and developing idea into written text. This is different from Jigsaw model which relies on explanation from peers and does not quite need high language logic ability but prioritizes real social relationships (Arend, 1997). Therefore, in this model, high language logic ability could not be optimized so the result is not as good as CIRC model.

The data analysis result of this research supports the research result of Cromley & Azevedo (2007) which was published in *Journal of Educational Psychology*, Volume 99, page 311-325, titled *Testing and Refining the Direct and Inferential Mediation Model of Reading Comprehension*. In the result of this research, Cromley and Azevedo conclude that reading, writing, and thinking ability are tightly related among each other. The higher someone's thinking ability, the better his reading and writing skill.

Further analysis about the differences of reading skill grade on the level words introduction (m1), lateral comprehension (m2), interpretative comprehension (m3), critical comprehension (m4), and creative comprehension (m5) are found in the following data. On student group who has high logic in CIRC, Jigsaw, and STAD model, uneven grade spread distribution is found. On the subject type m1 and m2 among the model CIRC, Jigsaw, and STAD the acquired average grade of these student groups are almost equal. On the subject m1, the acquired average grade is 87 for CIRC, 88 for Jigsaw, and 89 for STAD. On the subject m2, the acquired average grade is 90 for CIRC model, 92 for Jigsaw, and 93 for STAD. This means that reading skill on the subject m1 and m2 for the students whose logic ability is high; the three models are equally effective. Meanwhile, on the subject m3, m4, and m5, among the model CIRC, Jigsaw, and STAD, the acquired average grade of these student groups are different. On the subject m3, the acquired grade is 85 for CIRC, 75 for Jigsaw, and 75 for STAD. On the subject m4, the acquired grade is 85 for CIRC, 73 for Jigsaw, and 72 for STAD. On the subject m5, the acquired grade is 85 for CIRC model, 69 for Jigsaw, and 69 for STAD. This means that the reading skill on the subject m3, m4, m5, for the students whose logic ability is high, the application of CIRC or the other two models has significant differences.

From the result of data analysis it can be concluded that the subject m1 and m2 still have recitation-oriented and written characteristics, which on high logic ability, the integration of reading and writing is not necessarily needed. Meanwhile, on the subject m3, m4, and m5, which is not only written but also implied, analyzing, completing concept, comparing, evaluating, even applying in daily life, therefore to comprehend them it is needed not only high logic ability, but the cohesive integration of reading and writing which is interpretative, critical, and creative. This analysis result is in tune with the research result of Stevens & Slavin (1986). This analysis result is also supported by the research result of Hertz-Lazarowitz, Ivory & Calderon (1993) which stated that CIRC model is a cooperative learning model that is specifically applied in language skill and needs logical language analysis.

The reading skill of student group who has high language logic ability in the application of Jigsaw model is as good as in STAD model. This is visible from the absence of significant difference between the reading skill average grade of the student group who participates in Jigsaw model with high logic (80.25) and STAD learning model with high logic (80.10). The result of this analysis after further examination, it is found even grade spreading distribution of reading skill grade on all types of reading skill subject. On the subject m1 and m2 in Jigsaw and STAD model, the acquired average grade by the student groups are almost equal and very excellent. On the subject m1, the acquired average grade is 88 for Jigsaw and 89 for STAD. On the subject m2, the acquired average grade is 91 for Jigsaw model and 93 for STAD model. This means that on the subject m1 and m2, for students whose logic ability is high, in both of the models can be optimized.

Meanwhile, on the subject m3, m4, and m5, in Jigsaw model and STAD model, the acquired average grade by these student groups are equal but less optimal. On the subject m3, the acquired grade is 75 for Jigsaw and 75 for STAD. On the subject m4, the acquired grade is 73 for Jigsaw model and 72 for STAD model. On the subject

m5, the acquired grade is 69 for Jigsaw model and 69 for STAD model. This means that on the subject m3, m4, and m5, for students whose logic ability is high, in both of the models show the same result but less optimized. From the result of data analysis it can be concluded that on the subject m1 and m2 which still have recitation-oriented and written characteristics, high logic ability is very required in both models and the result is optimal. While on the subject m3, m4, and m5 which is not only written but also implied, analyzing, completing concept, comparing, evaluating, even applying in daily life, therefore to comprehend them, the both models cannot optimize high logic ability. This also means that for the three comprehensions, it does not only need high logic ability but also learning model that supports the improvement of creativity capacity.

The reading skill of the student group who has low language logic ability, the application of the three learning models is equally good. This is shown from the absence of significant difference among the average grade of reading skill of the student group who participates in CIRC learning model with low logic which is 73, Jigsaw learning model with low logic is 73, and STAD model with low logic is 73. The detail examination towards this analysis result shows that the similarity of reading skill grade on the student groups who have low logic on the three models, it is found even grade spreading distribution of reading skill grade on all levels of reading skill subject. On the subject m1 and m2, among CIRC, Jigsaw, and STAD models, the acquired average grade by these student groups are almost equal and show good result. In CIRC model, the subject m1 acquired grade is 85, in Jigsaw model is 85, and in STAD is 84. In CIRC model, the subject m2 acquired grade is 90, in Jigsaw model is 90, and in STAD model is 91. This means that on the subject m1 and m2, the three models constantly optimize the grade for students whose logic ability is low.

Meanwhile on the subject m3, m4, and m5, in either CIRC model, Jigsaw model, or STAD model, the acquired average grade of these low logic student groups are similar but less optimized. In CIRC model, the subject m3 acquired grade is 66, in Jigsaw model is 66, and in STAD model is 67. In CIRC model, the subject m4 acquired grade is 63, in Jigsaw model is 64, and in STAD model is 63. Meanwhile on the subject m5 in CIRC model the grade is 59, in Jigsaw model is 58, and in STAD model is 56. This means that on the subject m3, m4, and m5 for the students whose logic ability is low, the three models shows the similar results but not optimal.

From the result of data analysis, it can be concluded that on the subject m1 and m2 which still have recitation-oriented and written characteristics, low logic ability does not become a problem, therefore in the three models the results are still optimal. While on the subject m3, m4, and m5 which is not only written but also implied, analyzing, completing concept, comparing, evaluating, even applying in daily life to comprehend them, the three models cannot be optimal for the students whose language logic ability is low.

5. Conclusions

There are conclusions results in the study. *First*, the reading skill of the students who joined in CIRC learning model is better than those who joined in Jigsaw model. *Second*, the reading skill of the students who joined in CIRC learning model is better than those who joined in STAD model. *Third*, the reading skill of the students who joined in Jigsaw model while those who joined in Jigsaw and STAD learning model have the same skill level. *Fourth*, there are interactions between the use of cooperative learning model and the language logic ability in influencing reading skill. The interactions are to be used for students who have high language logic ability, CIRC learning model is more effective compared with Jigsaw and STAD, while Jigsaw and STAD does not show an effectiveness difference. To be used the use students who have low language logic ability, models of CIRC, Jigsaw, or STAD does not show an effectiveness difference.

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