



# THE IMPLEMENTATION OF INQUIRY LEARNING MODEL TO IMPROVE THE STUDENTS' ENGLISH LEARNING (A Case Study in Class XII IPA-3 of MAN 2 Pati Central Java in Odd Semester Academic Year 2019/2020)

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## ABSTRACT

*The purpose of this study was to determine whether there was an increase in the English learning achievement of students. The research subjects were 36 students of class XII IPA-3 Madrasah Aliyah Negeri (MAN) 2 Pati Central Java. The results shows that there was an increase in students' English learning achievement as indicated by: (1) the average student achievement in cycle I was 7.29, cycle II was 7.49 and cycle III cycle III was 8.81 ; (2) in the first cycle there were 22 students or 61.11% who completed the study; and those who did not complete were 14 students or 38.89%; in cycle II there were 26 students or 72.22% complete learning; and students who did not complete there were 10 students or 27.78%; and in cycle III there are 36 students or 100% complete learning; and there are no students who do not complete; and (3) completeness of classical learning in the first cycle is 61.11%; in cycle II classical completeness became 72.22%; while in cycle III it reached 100.00%. This means that the competency test / evaluation results in cycle I, cycle II and cycle III always increase.*

**Keywords:** *inquiry learning, action research.*

Learning English is directed to develop these skills so that students are able to communicate in English at a certain literacy level. This literacy level includes performative, functional, informational, and epistemic. At the performative level, a person is able to read, write, listen, and speak with the symbols used. At the functional level, a person is able to use language to meet the needs of everyday life such as reading newspapers, manuals, or instructions. At the informational level, a person is able to access knowledge with language skills, while at the epistemic level, he is able to express knowledge into the target language (Alfian, 2019; (Yamin, 2017).

Learning English in senior secondary schools is expected to reach the informational level because they are prepared to continue their education to higher education. The school has succeeded in achieving the goals of learning English, especially learning to speak. The students have been provided by the teacher with the ability to speak in various types of dialogue for various purposes both formally and informally. This means the teacher and students have carried out speaking learning as practiced (Laraswati, 2013; Suherman, 2003).

In carrying out the teaching and learning process, systematic steps are needed

to achieve predetermined goals. What must be done is to use a suitable method so that students can think critically, creatively and innovatively. Therefore we need a learning approach that involves students intellectually and emotionally, so that students are trained to learn actively and creatively (Suyitno, 2008; Hamalik, 2009).

The starting point for the discovery of many innovative learning approaches is changing the way students perceive students as objects to become subjects in the learning process. Nurhadi argues that one of the tendencies that is often overlooked is forgetting that the essence of learning is student learning and not teacher teaching. To answer this problem, the teacher must be able to develop a learning model that emphasizes the critical and creative power of students, namely *the Inquiry Learning Model* (Depdiknas, 2017; Nurhadi, 2004).

The inquiry learning model emphasizes the process of searching and finding. Subject matter is not given directly. The role of students in this strategy is to find and find their own subject matter, while the teacher acts as a facilitator and guide for students to learn. In this model, a series of learning activities emphasizes critical thinking processes and analyzes to seek and find their own answers to a problem being questioned through questions and answers between teachers and students. This learning strategy is often called a strategy *heuristic*, which means "I found it". (Siew et al., 2017; Ismail & Elias, 2006; Poedjiadi, 2005).

However, the reality in the field shows that the teaching and learning process is often associated with boredom, reluctance and failure for some students since they were in elementary school (Nasution et al., 2016). The real conditions in MAN 2 Pati show that student achievement tends to be static and stagnant and even has decreased. This

problem occurs because of the absence of student learning motivation, as a result of the application of the learning model that is not precise, monotonous, and there is no variation in the learning process, which creates an impression of boredom and boredom in students. As a result, student learning achievement, especially the students' learning achievement in English class XII IPA-3 MAN 2 Pati, academic year 2019/2020.

The purpose of this study was to determine whether there was an increase in the English learning achievement of students in class XII IPA-3 MAN 2 Pati, in the Odd Semester of the 2019/2020 Academic Year. The research hypotheses of this action research are: (1) there is an increase in students' English learning achievement; (2) there is an increase in the activeness of class XII IPA-3 MAN 2 Pati in the Odd Semester of the 2019/2020 school year after the model is applied *Inquiry Learning*.

## METHOD

This research method is a classroom action research conducted in several cycles (Somekh, 2006). Each cycle consists of planning, implementing, observing and reflecting. The results of the study are focused on the ability of students to do learning evaluation questions so that learning achievement and learning completeness can be achieved (Afrizal, 2015).

This classroom action research was conducted within 3 (three) months, from September to November in the odd semester of the school year 2019/2020. This research was conducted in class XII IPA-3 at MAN 2 Pati in the odd semester of the 2019/2020 school year.

This classroom action research is designed to be carried out in three cycles (I, II, III). Each cycle consists of planning, acting, observing and reflecting, starting from

initial observation, planning, implementing cycle I, implementing cycle II, and preparing reports (Hui & Grossman, 2008). Sources of research data are students and researchers themselves. Data in this research data are qualitative and quantitative. The qualitative data in the form of observations of student and researcher/teacher activities through observation sheets (Creswell, 2009). The quantitative data are in the form of observations about students' cognitive abilities from the evaluation results. In collecting data, researchers used questionnaires, observation and test methods. The questionnaire method in the form of student responses, the observation method used to determine student activities during the learning process, was obtained from student observation sheets. The test method is in the form of learning achievement value data after learning with a learning model (Creswell, 2009).

Analysis of research data includes data analysis of student activity, learning achievement and student interests. Student activity data were analyzed using descriptive techniques through percentage with the percentage formula (Miles & Huberman, 1994). The learning achievement data were taken from the students' cognitive abilities in solving problems and analyzed by calculating the average value of classical learning completeness. Student interest data were analyzed to determine student responses in learning through the Inquiry Learning model.

To determine the success of increasing student learning outcomes on cognitive abilities (learning achievement) by applying the Inquiry Learning model, it can be seen from the success indicators as follows:

1. The ability of students in answering evaluation questions of learning material can increase with a value above 7.5 to

reach at least 80% of the total number of students.

2. Activity of students in the learning process can be increased by a score of between 60% -75% to the activity being.
3. The activeness/ performance of the researcher / teacher in implementing learning in the classroom as seen from the observation sheet, the activity of the researcher / teacher is increasing.

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## FINDINGS

### A. Research Preparation

Preparation is very important to conduct a research so that the results can be achieved optimally. Several things that researchers need to do before conducting research are: (1) Conducting observations to identify problems through interviews with fellow subject teachers; (2) Researchers ask permission from the principal to conduct research; (3) Determining the selected class as research subjects based on the consideration of fellow subject teachers; (4) Making research instruments in the form of lesson plans, teacher observation sheets, student activity observation sheets, student worksheets and evaluation questions; (5) compile a questionnaire on student interest in the model *Inquiry Learning*.

### B. Research Implementation

This research was designed in several cycles, each cycle consisting of four stages, namely planning, action, observation and reflection. If you have achieved the expected results, then the cycle is considered sufficient. The research implementation in Cycles I, II, and III can be described as follows:

Planning activities consist of: (1) Designing *the Inquiry Learning model*, (2) Compiling worksheets for students, (3) Distributing worksheets to students used to solve problems / evaluation questions, (4)

Divide the class into groups, (5) Arrange observation sheets to observe student communication activities.

The implementation activities consist of: (1) Explaining the material according to the learning plan and the steps of *the Inquiry Learning model*, (2) Dividing students into groups, (3) Distributing worksheets to students, (4) Dividing questions to each group, (4) Complete evaluation questions in groups, (5) Guiding, supervising and assisting students, (6) Motivating students to conduct group discussions, (7) Presenting students' work results in front of the class, 8) Giving students the opportunity to ask questions, (9) Evaluating the results of student work.

Observation / observation activities include observing the activities of students and researchers / teachers during the application of *the Inquiry Learning model*. The activities of the researcher / teacher are in accordance with *the Inquiry Learning model*, which includes the steps: observing and asking questions about phenomena, proposing presumptions or possible answers, collecting data, and formulating conclusions. Student activities include student attention during the learning process, namely: paying attention to teacher explanations, teamwork, asking questions between students and teachers, being active in completing evaluation questions, and presentation skills.

### 1. Observations in Cycle I

From the observations made on the activities of students in groups in cycle I, the following results were obtained:

Table 2 Student activity in Groups of Cycle II

STUDENT ACTIVITY IN GROUP OF CYCLE I				
No	Student Activity	Score	%	Type
1	A. Attention to teacher explanation	67	47%	Enough
2	B. Cooperation in groups	71	49%	Enough
3	C. Asking between students and teachers	70	49%	Enough
4	D. Activeness in completing questions	70	49%	Enough
5	E. Student presentation skills	73	51%	Enough

Graphically it can be seen in figure 1:

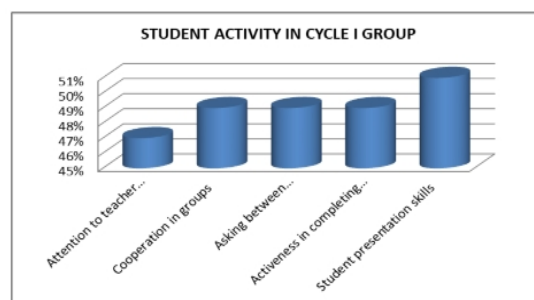


Figure 1. Student Activeness in Groups of Cycle I

In cycle 1, the participation of individual student activeness in teaching and learning activities with using the Inquiry Learning model is still **"low"**. The score is 14 from a maximum score of 30 with a percentage of 46.67%.

The results of observations on teacher activity / performance in the learning process in cycle I get the score of 20 or 51.28% from the maximum score of 39. The learning criteria in delivering the material is **"lack"**. However, the beginning of the lesson could not motivate students so that in the learning process student activity was still lacking. Observation of the results of the evaluation in cycle I obtained the following results:

Table 3. The evaluation in cycle I

EVALUATION TABLE CYCLE I			
No	Evaluation Results	Score	%
1	Average	7,29	72,89%
2	Highest score	8,00	
3	Lowest score	5,60	
4	Number of students who completed	22	61,11%
5	Number of students who did not complete	14	38,89%
6	Classical completeness		61,11%

Because the percentage of classical learning completeness has only reached 61.11%, it has not met the expected results from the completeness / success indicator.

## 2. Observation in Cycle II

From the observations made on student activities in cycle II which were carried out in groups, the following results were obtained:

Table 4 the observations activities in cycle II

STUDENT ACTIVITY IN GROUP OF CYCLE II				
No	Student Activeness	Score	%	Notes
1	A. Attention to teacher explanation	105	73%	Medium
2	B. Cooperation in groups	110	76%	High
3	C. Asking between students and teachers	105	73%	Medium
4	D. Complete activity questions	107	74%	Medium
5	E. Student presentation skills	106	74%	Medium

Graphically it can be seen in the following figure:

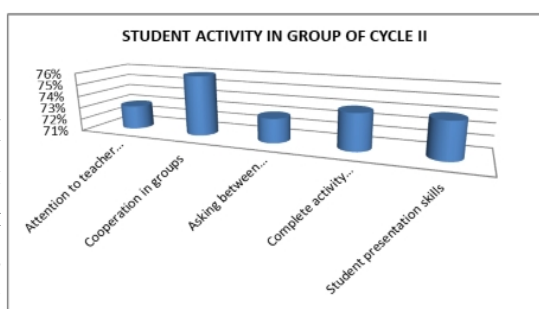


Figure 2 Student Activeness in Cycle II Groups

Observations on activity/*performance* teacher in the learning process in cycle II

obtained a score of 30 or 76.92% of the maximum score of 39 with the criteria "*sufficient*". Observation of the evaluation results in cycle II obtained the following results:

Table 5. Evaluation Results of Cycle II

TABLE OF CYCLE II EVALUATION			
No	Evaluation Results	Score	%
1	Average	7,49	74,89%
2	Highest Score	8,40	
3	Lowest Score	5,60	
4	Number of Students who completed	26	72,22%
5	Number of Students who did not complete	20	27,78%
6	Classical Completion		72,22%

Because classical completeness only reached 72.22%, it means that it is not in accordance with the predetermined indicators.

## 3. Observations in Cycle III

From the observations made on student activities in cycle III which were carried out in groups, the following results were obtained:

Table 6. Student activity in Cycle III Groups

STUDENT ACTIVITY IN CYCLE III GROUP				
No	Student Activity	Score	%	Ket
1	A. Attention to teacher explanation	135	94%	High
2	B. Teamwork in groups	138	96%	High
3	C. Asking between students and teachers	137	95%	High
4	D. Activeness in completing questions	131	91%	High
5	E. Student presentation skills	134	93%	High

Graphically it can be seen in the following image:

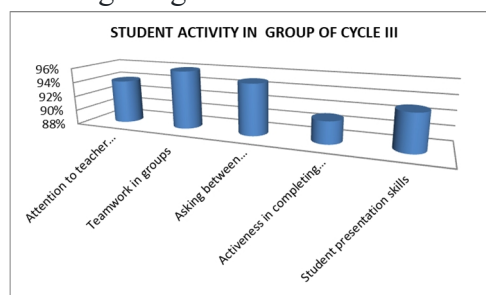




Figure 3. Student Activeness in Cycle III Groups

Individual student in cycle III in participating in teaching and learning activities using the model *Inquiry Learning*, activeness obtains activity "**high**", with a score of 29 or 96.67% of the maximum score of 30.

Observations on activity /performance teacher in the learning process in cycle III obtained a score of 38 or 97.44% of the maximum score of 39 with the criteria "**good**".

Observation of the evaluation results in cycle III obtained the following results:

Table 7. Evaluation Results Cycle III

CYCLE III EVALUATION TABLE			
No	Evaluation Results	Score	%
1	Average	8,81	88,11%
2	Highest Score	10,00	
3	Highest Score	8,00	
4	Number of students who completed	36	100%
5	Number of students who did not complete	0	0%
6	Classical completeness		100%

Because classical completeness has reached 100%, it means that it is in accordance with the predetermined indicators.

#### 4. Comparison of Cycle I, Cycle II and Cycle III

Based on the description above, a comparison table for cycle I, cycle II and cycle III can be made as follows:

a. Comparison of Student Activity in Groups

Table 8 Comparison of Student Activity in Groups

TABLE OF STUDENT ACTIVITY IN GROUP					
No	Student Activities	Cycle I	Cycle II	Cycle III	Notes
Paying attention to teacher					
1	A. explanations	47%	72,92%	93,75%	Increasing
Asking between students					
2	B. Cooperation in groups	49%	76,39%	95,83%	Increasing
Asking between students					
3	C. and teachers	49%	72,92%	95,14%	Increasing
4	D. Solving activity	49%	74,31%	90,97%	Increasing
5	E. Student presentation skills	51%	73,61%	93,06%	Increasing

Graphical comparison can be seen in the following figure:

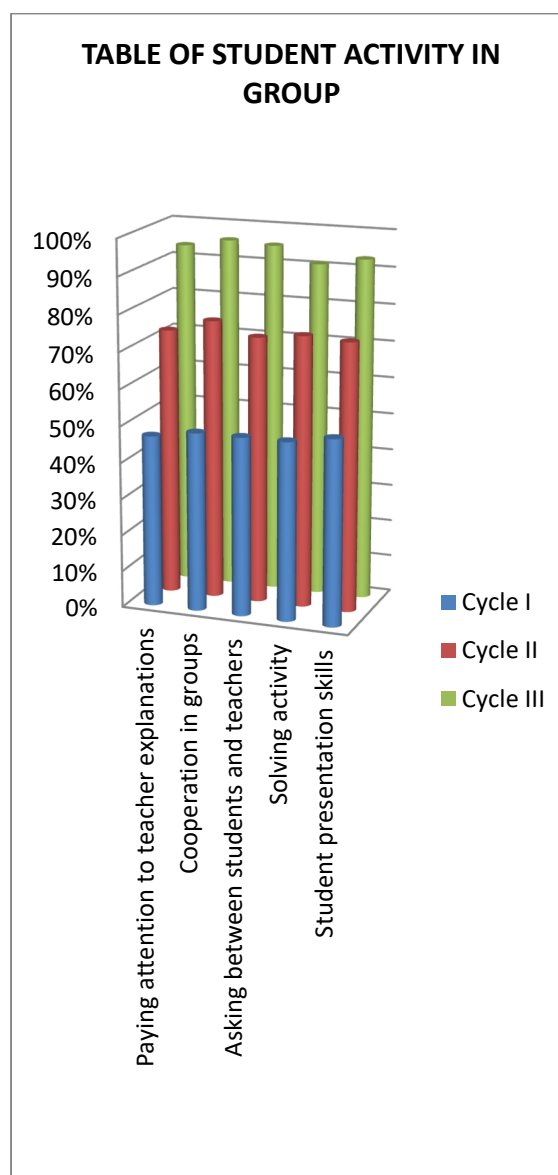


Figure 4 Comparison of Student Activity in Groups

b. Cumulative Comparison

Table 9 Cumulative Comparison of Cycles I, II and III

No	Indicators	Cycle I	Cycle II	Cycle III
1	Student activeness	47%	70%	97%
2	Activeness in groups	49%	74%	94%
3	Students' average score	49%	73%	95%
4	Students Complete	61%	72%	100%
5	Students do not complete	39%	28%	0%
6	Classical completeness	61%	72%	100%
7	Teacher Performance	51%	77%	97%
8	Student Interest		85,22%	

Graphically, the comparison can be seen in the following figure:

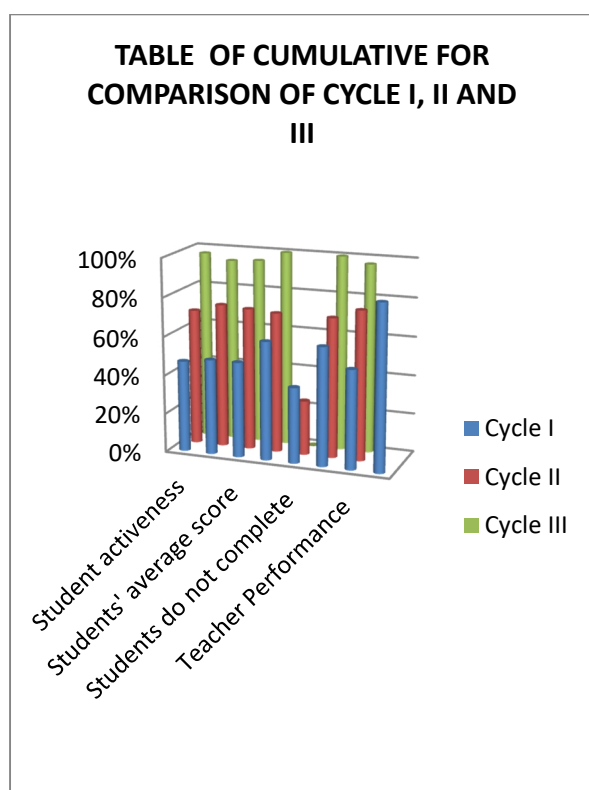


Figure 4 Cumulative Comparison of Cycles I, II and III

Reflection activity is data analysis of observations. The constraints in cycle I will become problems in cycle II, which is then continued by designing actions in the next cycle, namely cycle II.

## DISCUSSION

The discussion this study is based on the results of observations and is followed by reflection on the first cycle and second cycle. In the first cycle based on observations made on the teacher, it shows that the activity/*performance of the* teacher is quite good. It can be seen on the result sheet of activity observations/*performance* teacher in the first cycle a score of 20 or 51.28% was obtained from a maximum score of 39 or in the category "*less*", in the second cycle a score of 30 or 76.92 was obtained from a maximum score of 39 in the category. "*sufficient*"; while in cycle III a score of 30 or 97.44% was obtained from a maximum score of 39. These results indicate that performance of teachers has increased in each cycle.

The observations on student activities, the score obtained from the student activity observation sheet in the first cycle is 14 or 46.67% of the maximum score of 30 in the category "*low*"; in the second cycle a score of 21 or 70.00% was obtained from the maximum score of 30, in the category "*medium*"; and in cycle III obtained a score of 29 or 96.67% of the maximum score. These results indicate that student activity has increased in each cycle.

The observation results on each group discussion and working the student worksheets were said to be good. This is indicated by the average value of cycle I (48.8%). In cycle II the observation results reached 74.0. In cycle III the observation results increased by 93.8%. This increase occurred because in cycle II and cycle III the level of activity and cooperation in the group was higher so that they were able to solve the problems given well.

The observations on the results of the evaluation in cycle I can be seen in the results of the competency test in cycle I, which shows the ability of students to solve questions,

namely an average of 7.29 obtained; 22 students who completed learning or 61.11% and those who did not complete were 14 students or 38.89%; in cycle II, it was obtained an average of 7.49; students who completed 26 students or 72.22 students who did not complete the study 10 students or 27.78%; and in the third cycle obtained an average of 8.81; 36 students who passed or 100% and there were no students who did not. From these results, it shows that learning completeness has reached the predetermined indicators, so there is no need to continue this action research in the next cycle.

The results of students' response questionnaire show that most students prefer the model *Inquiry Learning*, with a percentage of 85.25%, or **high** criteria. Rusman (2011:219) conducted research on the model *Inquiry Learning*. The results showed that cooperative interactions have various positive influences on children's development. Thus, it can be said that the *Inquiry Learning* model can improve student achievement. It can be a solution for teachers to improve student achievement.

## CONCLUSION

After conducting an analysis of the results of action research and discussion, it was concluded that the model *inquiry learning* that had been implemented in class XII IPA-3 students at MAN 2 Pati, in the Odd Semester of the 2019/2020 school year were as follows: (1) There was an increase

Students' English learning achievement after following the model *inquiry learning*, this is indicated by an increase in each cycle; (2) There is an increase in student activity in following the model *inquiry learning*, this is shown that student activity always increases in each cycle; (3) There is an increase performance in teacher in the implementation of the model *inquiry learning*. This is indicated by an increase in *performance* teacher in cycle II and cycle III; (4) Student responses to the implementation of the model *inquiry learning* how a very good response.

Based on the results of action research on class XII IPA-3 students of MAN 2 Pati, the 2019/2020 academic year the researchers recommend several things: (1) There is a need for an approach and strategy and a model that is in accordance with the material and conditions of students in the learning process; (2) The Model *inquiry learning* should be applied by the teacher, because with this learning it can increase students' creativity and activeness, can motivate students to study hard, and can improve student achievement; (3) In the model *inquiry learning*, the teacher as a facilitator should encourage students to be more active and motivated in learning; (4) Teachers should be more patient and cooperative in learning, especially in dealing with students who are less and difficult to accept lessons, and teachers must be clever in managing the class.

## REFERENCES

- Afrizal, M. (2015). A Class Action Research: Improving Speaking Skills Through Information Gap Activities. *English Education Journal*, 6(3), 342–355.
- Alfian, A. (2019). Students' Voice: A Need Analysis on Teaching and Learning English at Islamic University. *IJET (Indonesian Journal of English Teaching)*, 8(2), 63–72. <https://doi.org/10.15642/ijet2.2019.8.2.63-72>
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods*



- Approaches. In V. Knight, J. Young, & B. Bauhaus (Eds.), *Muqarnas* (3rd ed.). SAGE Publications, Inc. <https://doi.org/10.2307/1523157>
- Depdiknas. (2017). *Model-Model Pembelajaran*. Jakarta: Direktorat Pembinaan Sekolah Menengah Atas, Direktorat Jenderal Pendidikan Dasar dan Menengah Kementerian Pendidikan dan Kebudayaan.
- Hamalik, O. (2009). *Kurikulum dan Pembelajaran*. Jakarta: Bumi Aksara.
- Hui, M.-F., & Grossman, D. L. (2008). *Improving Teacher Education through Action Research* (M.-F. Hui & D. L. Grossman (eds.)). Routledge: Taylor and Francis Group.
- Ismail, N., & Elias, S. (2006). Inquiry Based Learning: a New Approach To Classroom Learning. *English Language Journal. UPSI Malaysia*, 2(1), 13–24.
- Laraswati, E. (2013). Management Instruction and English Education Studies at MAN 1 Sragen. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699. <https://doi.org/10.1017/CBO9781107415324.004>
- Miles, M. B., & Huberman, A. M. (1994). Qualitative Data Analysis. In R. Holland (Ed.), *SAGE Publication* (2nd ed., Vol. 251, Issue 2). SAGE Publication Ltd. <https://doi.org/10.1007/BF02759913>
- Nasution, S. W. R., Bukit, N., & Ginting, E. M. (2016). Pengaruh Model Pembelajaran Inkuiri Terbimbing Dan Kreativitas Terhadap Kognitif Tinggi. *Jurnal Pendidikan Fisika*, 5(2), 101–105. <http://jurnal.unimed.ac.id/2012/index.php/jpf>
- Nurhadi. (2004). *Pembelajaran Kontekstual*. Makasar: UNM.
- Poedjiadi, A. (2005). *Sains Teknologi Masyarakat: Model Pembelajaran Kontekstual Bermuatan Nilai*. Bandung: Remaja Risdakarya.
- Siew, J., Chong, Y., Siew, M., Chong, F., Shahrill, M., & Abdullah, N. A. (2017). Impletementing Inquiry-Based Learning and Examining. *Journal on Mathematics Education*, 8(2), 157–164. <https://doi.org/http://dx.doi.org/10.22342/jme.8.2.3964.157-164>
- Somekh, B. (2006). *Action Research: A Methodology for Change and Development*. Open University Press.
- Suherman, E. (2003). *Strategi Pembelajaran Bahasa Inggris Kontemporer*. Bandung: Universitas Pendidikan Indonesia.
- Suyitno. (2008). *Perencanaan Pembelajaran*. Jakarta: UNJ.
- Yamin, M. (2017). Metode Pembelajaran Bahasa Inggris Di Tingkat Dasar. *Jurnal Pesona Dasar*, 1(5), 82–97.

