

## **EMPLOYING JIGSAW IN ENGLISH ACADEMIC WRITING: AN ACTION RESEARCH IN AN EFL CLASS IN INDONESIA**

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### **ABSTRACT**

The aim of the study was to get increasing of students' English academic writing ability through the jigsaw technique. It conducted in the English Education Program Study of Postgraduate Program Universitas Indraprasta PGRI Jakarta. In this study has emphasized teamwork learning. The research was action research that used the exploratory mixed method. The process of collecting data used test, observation, documentation, interviews, and daily note. The technique of data analysis used qualitative analysis and quantitative analysis. The sample of the study is 20 students. The result of the study shows that the average score of the student English academic writing test is different. The average of the test in cycle 1 is 51.1, cycle 2 is 51,2 and cycle 3 is 79,6.

**Keywords:** *Academic Writing, English Learning, Jigsaw*

### **Sari**

Tujuan dari penelitian ini adalah untuk mendapatkan peningkatan kemampuan menulis akademik bahasa Inggris menggunakan teknik Jigsaw. Penelitian dilakukan di Program Studi Pendidikan Bahasa Inggris pada Program Pascasarjana Universitas Indraprasta PGRI Jakarta. Penelitian ini menitikberatkan pada pembelajaran kerja tim. Pendekatan penelitian adalah penelitian campuran menggunakan metode penelitian tindakan. Proses mengumpulkan data menggunakan tes, observasi, dokumentasi, wawancara dan catatan harian. Teknik analisis data terdiri dari analisis data kualitatif dan analisis data kuantitatif. Sampel penelitian sebanyak 20 mahasiswa. Hasil penelitian menunjukkan perbedaan nilai tes menulis akademik bahasa Inggris. Nilai rata-rata tes pada siklus 1 sebesar 51.1, siklus 2 sebesar 51,1 dan siklus 3 sebesar 79,6..

**Kata Kunci:** Menulis Akademik, Bahasa Inggris, Jigsaw

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### **Introduction**

English academic writing for Postgraduate students needs hard effort because some students still have difficulties. The academic writing in postgraduate student has a different concept with the graduate student. They have to write for many purposes.

It implies that their writing is used for the daily activity. It's not just for formal situation like as in academy or education program however additionally the writing activity used for people work. Murray (2012) stated that writing process in university education program exists to create basic foundation through developing your intellect and powers of analysis, your specialist profession which have chosen and your ability to manage a role in taking forward that field of study through your own ideas and creativity. It refers to the process of thinking from secondary school to university is described in the expectation teacher.

For university students, writing known as social activity. Sokolik viewed that writing may be combination of activities between processes and products. Olson described the process of writing is as pertaining to the unification of ideas from starting until finish and into writing that was able to revealed, it was helpful for novice writers. As a result of writing has many steps. The writing is supported with the logic and it is able to create the different imagination (Linse, 2005). Writing has several stages that are adjusted to the procedure. Kroll had identified 4 stages in obtaining writing skills, namely preparation, consolidation, differentiation, and systematic integration (Naomi & Stainthorp, 2006).

Therefore, the aims of writing learning subject were to build the knowledge that can be used as analysis way in writing problem. the result of observation concluded that Academic writing subject faced some problems because some students cannot write the right paragraph. They used the Indonesia context in making English paragraph. The main problems in writing subject is; 1) difficulty developing paragraphs; 2) difficulty understanding cohesion and coherence; 3) difficulty using stages in writing. As we know that writing preparation has the core role in writing. It's intrinsic to the writing process. Hayes suggests that creating a writing preparation always involves setting goals, generating ideas, and reflecting them and it necessarily involves translation and transcription to produce a written product: a plan. Thus, creating a written plan involves a complete writing procedure that produces a text designed to aid the writer of the preparation of producing another text (Byrnes and Manchon, 2014). Besides that, the result of analysis data in observation and interview concluded that students need the group discussion in writing learning. Students have the different characteristics and they can learn with a friend and by self. Discussion helps students who have difficulty writing because many students are not able to understand the writing process.

Therefore, the writing class needs the appropriate method of learning. This study offers the jigsaw technique in the writing learning because it will help the teacher to create the student's cooperation. It provides to teamwork ability. It's an crucial aspect for the students in learning process. Because almost the students are be as a teacher in the class or for her children at home. Jigsaw is a part of collaborative learning technique (Hedeen, 2003). Some analysis has proved it. Evcim & pek (2013) declared the analysis finding that there was a big distinction between the experiment and management cluster in term of victimisation Jigsaw II technique. Jigsaw II includes a purposeful impact on the tutorial action of scholars. In their analysis showing that It will be declared that being each an educator and a student helped students develop a far better interaction and actively participate within the method. A similar analysis has tested that Cooperative learning techniques are promoted for the event of educational and social competencies. One such technique, Jigsaw, creates cooperation by structuring student interdependency through the training task, instead of through the grading system. A method and outcome analysis of Jigsaw was conducted (Moskowitz, Malvin, Schaeffer, & Schaps, 1985).

In CSCL contexts (Computer Supported cooperative Learning) cooperative activities with totally different levels of structuredness square measure typically accustomed foster discussion and exchange among students and enhance collaboration. In this field, the talk around whether or not and to what extent it's helpful to structure the activities planned to students remains terribly spirited. during this paper, 2 cooperative activities square measure explored, specifically an easy Case Study (moderate level of structuredness) and also the Case Study joint with the Jigsaw (higher level of structuredness). Starting from the analysis of the interactions occurred among students of 2 real on-line courses activity these activities, it's attainable to spot sturdy points and weaknesses of the 2 activities, thus to draw some reflections on the impact of structuredness on the cooperative learning process(Pozzi, 2010). it's versatile follow and lots of variations. Besides that, it suggested for English educational writing.

It will be seen from Maden's analysis. In our study on impact of the Jigsaw I as part of the cooperative learning techniques implementation on written expression skills, the result of study indicate that a few variety of Jigsaw implementation impact on the students' test and

discussion in the class. It shows the different ability between students that has learnt using Jigsaw technique and traditional method in written expression pattern. There are many other studies pointing out cooperative learning methods has a positive impact on students' writing and written expression ability. Student perceptions of the Jigsaw I application were very positive, especially as an choose of learning experience (Maden, 2011).

Another analysis shows that Jigsaw IV answered the issues of scholars and lecturers victimisation Jigsaw II and had a positive effect on the students' educational achievement(Holliday, 2000). there's a positive effects of cooperative learning (using the jigsaw method) on students' action during a general chemistry course. The Chemistry Achievement Test (CAT) and Phase Achievement Test (PAT) were used. One of these categories served because the experimental cluster (n = 52), that was educated victimisation cooperative learning (jigsaw) ways, whereas the opposite category served because the management cluster (n = 56), that was educated victimisation ancient learning ways. The results indicate that the instruction supported cooperative learning yielded considerably higher action in terms of the CAT and PAT scores compared to the take a look at a lot of the management cluster, that was educated with historically designed chemistry instruction (Doymus, 2007).

The review of the previous analysis indicates that there's still a scarcity of investigation within the implementation Jigsaw, particularly in educational writing learning at University. as a result of some analysis simply enforced the strategy because the sequence in Jigsaw while not building of the students' interest in learning. Thus, this research is aimed to implement the Jigswa on English academic writing that focuses to the building of togetherness in learning. Besides that, the student can manage their teamwork in learning. Therefore, the teacher can add the process of competition to evaluate students' learning, such as giving a quiz, puzzle, moving group members, different task between group of peer evaluation. In this study, the process of English academic writing postgraduate student needs many variations of teamwork learning. Thus, the problem in this study is "how is the effect of Jigsaw implementation on English academic writing ability for postgraduate students Universitas Indraprasta PGRI Jakarta?"

## Research Method

The study used action research method that used the exploratory mixed method. The steps of action research used Kemmis and McTaggart. There are 3 cycles to implement of jigsaw technique in English academic writing. The sample of research is 20 students. Collecting data process used; 1) test is to know students' English academic writing ability, 2) observation is to collect learning process in the class, 3) interview is to collect information from students and teacher about the effectiveness of learning, 4) documentation is to take the result of daily students learning, and 5) daily note is to know the students' perception of English academic writing learning. The validity of the study used credibility, transferability, dependability, and conformability. Besides that, to know students' difference in English academic writing used *t-test paired two samples for means*.

## Findings and Discussions

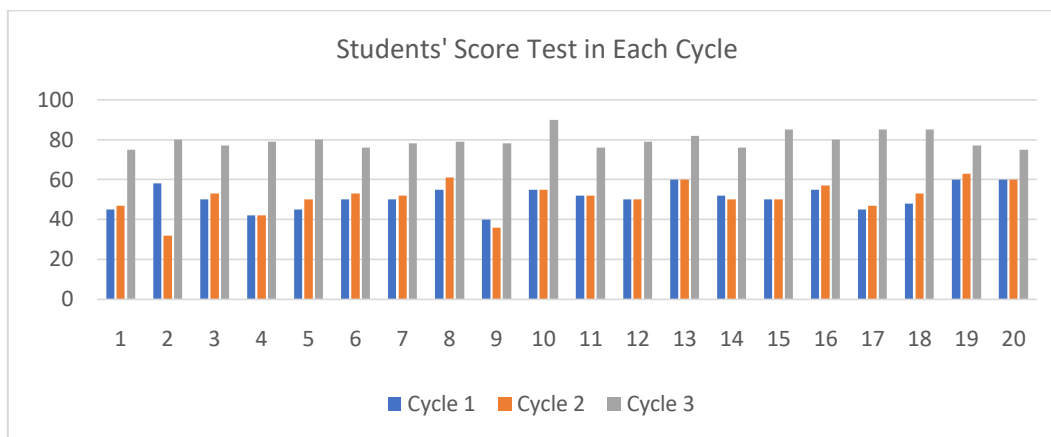
### 1. Findings

Academic writing learning has been done as 3 cycles. Each cycle has 4 meeting. Each cycle has disadvantages that have revised for next cycle. In the first cycle has concluded that students' English academic writing ability is still low. It can be seen from the result of the interview, observation process, documentation and daily note, and test. They are still confusing to divide the teamwork. Every student has his own selfishness to finish the assignment in the group. In cycle 2, the learning process emphasized to comprehend the teamwork through changing of member group and there is a leader in each group. The exercises are many variations. But the achievement of learning is still low. Therefore, cycle 3 has designed more different exercises. The students have to change of group member and one is a leader. He/ she guide the group in finishing their task. Here is comparing the result of the test in cycle 1, cycle 2, and cycle 3.

Table 1. Statistic Descriptive of English Academic Writing Test

	Cycle 1	Cycle 2	Cycle 3
Average	51.1	51.15	79.6
Standard Error	1.259	1.758102	0.89266
Median	50	52	79
Mode	50	50	80
Standard Deviation	5.769	7.862469	3.992097
Sample Variance	33.29	61.81842	15.93684
Range	20	31	15
Minimum	40	32	75
Maximum	60	63	90

Table 1 shows that in cycle 1, the average score of English academic writing is still low. The lowest score is 40 and the highest score is 60. These scores are not appropriate with the standard score in the class. The first cycle result is the same in cycle 2. While in cycle 3, it has increased to be 79,6. The average score in the last cycle has been suitable with the standard score. Thus, it can be concluded that the Jigsaw has given significant influence on the English academic writing learning in the class. Each student has good development of test score. Here is comparing the result of students' test;



Graph. 1 The Comparing Students' Score Test in Each Cycle

Graph 1 shown that between cycle 1 and cycle 2, nearly students didn't need to modification of score take a look at. However within the third cycle, they need a major modification. it's as a result of the students need to build the interaction with alternative, involving verbal interchange like giving suggestion to develop the most plan or topic sentences, giving an assessment to partners' writing, giving the data to develop their writing and peer assessment to get writing feedback. Therefore, there's important English educational writing ability before and after using a jigsaw. It can be seen from the t-test result;

Table 2. t-Test: Paired Two Sample for Means

Mean	51.36842
Variance	64.24561
Observations	19
Hypothesized Mean Difference	0
df	18
t Stat	-13.67
P(T<=t) two-tail	5.99
t Critical two-tail	2.1009

Table 2 gave the assumption  $t_{Stat} < t_{table}$  ( $-13,67 < 2.1009$ ). It can be said that  $H_0$  is rejected and  $H_1$  is accepted. It implies that jigsaw had a positive effect for the result of English academic writing learning. It has proven from other research, The Jigsaw strategy plugs this gap as each member of a group shows an integral act, so the students depend to achieve the task. They are in control and the teacher is a facilitator that create and provides necessary explanation. Jigsaw provides learners the opportunity to be responsible for autonomous learners. It used for reading and introducing research essay writing, but it are able to use with any reading passage in any teaching context.

## 2. Discussion

The jigsaw strategy in English academic writing learning have the positive effect to students' interest in writing learning. They can used their expertise and imagination to develop of writing. Jigsaw could be a variation of in-class activities to inspire and keep learners engaged and targeted on the text and task at hand. it's a noteworthy and helpful CL methodology that promotes effective learning, important thinking, learner autonomy, empathy, positive team mutuality and social and communication skills. It may be used with any ESL/EAP reading category and with completely different category (Esnawy, 2016).

Jigsaw is one of cooperative learning technique that impact to the students' teamwork in finishing the writing. In the learning process, every group must finish their writing from the exercise. They identify information or data to support their argument in writing. The member of group must give one data and writes a paragraph. It is teamwork learning. After that, peer assessment is done to get students' feedback. Then, the teacher and students discussed together to see some students' mistake in their writing. All students working in a small group must understand to contributes by helping other classmates. So they used their knowledge in the class, but also they build the cooperation in out of the class. It is effective to develop students' English academic writing ability.

The result of English writing learning shows that students can build togetherness during discussions. They cooperate each to build the cooperative process. Cooperative Learning Model could maintain students to understand descriptive text since they can share the difficulties to their friends in a group. The students also had more motivation to circumstance the best because they must compete with other groups (Haydan, 2013).

Moreover, students who feel they have higher writing skills can bring out peer learning activities. In the discussion, it stated that the leader in the team of discussion directed other students who were still weak. In addition, they exchange ideas well without facing obstacles. Students who are an introverted personality will be open when facing difficulties. So, the research result has found an innovation orientation during implementing the Jigsaw strategy. Because of the teacher directs and implements the jigsaw strategy correctly. The teacher has also completed this strategy with media learning when they faces difficulties in learning process. The implementation of jigsaw strategy is usually different in every cycle, therefore it is enhancing of writing learning for student grades at the last of learning cycle. Many researchers stated that jigsaw is effective and flexible in enhancing students' achievement in learning. In addition, they can understand to finish their exercise in their group and individual task.

### **Conclusion and Implications**

Jigsaw has increased student's teamwork discussion which enhance a productive environment in the writing class. It has given the significant effect on students in learning. They can build critical thinking. Motivation, empathy, and positive team. Therefore, this study is an alternative in teaching writing subject for the postgraduate student. The result of study has given an inspiration about the implementation of jigsaw on English language learning.

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### **Biography**

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