

kemahiran komunikasi tidak hanya dilihat dari aspek penyampaian pengetahuan semata-mata, tetapi kemahiran komunikasi dapat membantu seseorang memahami keperluan dan kehendak seseorang. Hasil dari analisis data yang dilakukan, mendapati bahawa kemahiran komunikasi yang diamalkan oleh pelatih dalam menempuhi alam pekerjaan berada pada tahap yang sederhana. Ini menunjukkan cara berkomunikasi kurang menjadi tumpuan di kalangan pelatih ILP Hulu Langat.

Dalam kajian berkaitan kemahiran menyelesaikan masalah pula penyelidik memperolehi tahap kemahiran menyelesaikan masalah dalam kalangan pelatih ILP adalah pada tahap yang tinggi. Pelatih memberikan respon bahawa semangat dan sikap menyelesaikan masalah pelatih ILP adalah memuaskan. Keadaan ini jelas dapat digambarkan melalui nilai bacaan min yang tinggi pada bahagian item persoalan yang diajukan seterusnya menunjukkan tahap penguasaan kemahiran menyelesaikan masalah sangat memberangsangkan. Antara penguasaan yang tinggi ditunjukkan oleh pelatih ialah pelatih mampu mencari penyelesaian secara alternatif dalam menyelesaikan sesuatu masalah, pelatih dapat menyelesaikan masalah yang dihadapi dalam jangka masa yang ditetapkan serta pelatih mampu memikirkan secara kreatif dan efektif dalam menyelesaikan masalah.

Seterusnya berkaitan kemahiran kepimpinan, hasil dapatan kajian yang diperolehi adalah selari dengan keperluan yang dituntut kepada para pelatih ILP yang telah menunjukkan tahap kemahiran kepimpinan pelatih berada pada tahap yang tinggi. Perbezaan antara elemen-elemen dalam tahap kemahiran kepimpinan ini jelas menunjukkan para pelatih dapat menguasai dengan baik dalam elemen kemahiran kepimpinan ini. Situasi ini jelas apabila terdapat nilai min yang tinggi bagi elemen-elemen tertentu antaranya ialah pelatih mudah membina hubungan yang baik dengan orang ramai, berkebolehan membina, melaksanakan dan mencapai matlamat kumpulan, menunjukkan kesungguhan dalam sesuatu tugas yang diberikan dan pelatih mampu menunjukkan disiplin diri sebagai seorang ketua. Dapatan kajian ini dengan kajian yang dijalankan oleh Rohanida Abd Manaf, Mohd Sofian Omar Fauzee dan Mohd Hamidi Bin Abdul Hamid (2002), yang menyatakan bahawa aktiviti ko-kurikulum lebih banyak menanam, memupuk dan memberi latihan awal dari segi aspek kepimpinan, sahsiah dan kemasyarakatan di kalangan pelajar.

Manakala kemahiran keusahawanan pula hasil kajian yang diperolehi menunjukkan para pelatih merasakan kemahiran yang mereka perolehi mampu menolong mereka di masa akan datang. Ini dapat ditafsirkan kerana hasil kajian menunjukkan tahap kemahiran usahawan pelatih ILP Hulu Langat berada pada tahap yang tinggi. Sikap positif yang boleh menjadikan pelatih pemangkin kecenderungan mereka dalam melibatkan diri dalam bidang keusahawanan. Melalui sikap jugalah menjadi kunci kejayaan kepada usahawan yang berjaya sekarang. Meajoriti pelatih ILP Hulu Langat lebih suka berdikari dan ingin mempunyai perniagaan sendiri. Menurut Wan Mohd Nazif dan Fazillah Ibrahim (2007), seseorang yang memiliki perniagaan sendiri merupakan bos kepada diri sendiri tanpa perlu menerima arahan daripada sesiapa.

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Effectiveness of Jigsaw Technique in *Hiragana* Writing and Reading Classes of Tenth Grade Students of Cenderawasih 1 Senior High School of South Jakarta in 2011/2012 Academic Terms

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Abstract

Human's relationship needs language as the communication tool. The success communication is strongly influenced by excellent language skills, i.e.: listening, reading, speaking, and writing. The main function of writing is as an indirect communication tool. The writer and the reader communicate through written texts. Moreover, reading means observing while pronouncing a written text in order to understand the content. Reading is also a process to acquire the message conveyed by a writer through a text. This research uses pure experimental method because the researcher gives treatment and control towards the variables by involving cooperative analysis to identify the effectiveness of Jigsaw technique for *Hiragana* reading and writing classes. The method aims at investigating the cause and effect relationship between the technique and the learning process by comparing experimental groups and experiment conditions. The results are compared to one or more control groups. The result shows that the score of the experiment class is higher than the control class. It means that the technique is effective for improving student's learning outcomes in *Hiragana* reading and writing. It is shown by the average post-test score of the experiment class, which is 8,42, and the control class score, which is 6,52. The technique plays important role because it is a cooperative learning model which can improve the reading and writing skills. There is significant relationship between the technique and the learning outcome of the reading and writing classes. It is shown by the fact that the t_{value} (10,86) is greater than the t_{Table} (1,67), so H_0 is rejected and H_1 is accepted. The research finding also shows that the classroom learning process is more interesting by applying the technique.

Keywords: Effectiveness, Jigsaw, *Hiragana*, Reading, Writing

INTRODUCTION

Language functions cover almost the entire human's living spheres. It is because something which is experienced, felt, and thought by someone can only be identified by other people if one communicates it using a language, both oral and written forms. The diversity of world's languages make the languages themselves diverse and interesting.¹

Japanese is a language which is different from other foreign languages. The language can be observed from pronunciation, vocabulary, grammar, accent, and its idiomatic expression. Japanese accents are strongly influenced by social and cultural aspects, such as region, social class, gender, and age.²

Moreover, language includes four skills, i.e.: listening, speaking, reading, and writing.³ Actually, the four-skill can further be divided into two big groups, namely receptive skills including listening and reading and productive skills, namely writing and speaking.⁴ Writing functions as an indirect communicative tool. A writer delivers his/her message to the readers by means of written form.⁵ Reading is reviewing and pronouncing a text or texts in order to understand the content.⁶ Reading can also be defined as a process to acquire messages delivered by a writer.⁷

Within the learning processes of *Hiragana* reading and writing, teachers need to apply cooperative techniques because most students are keen of an interesting learning program which enables them to work together with their peers and teacher, which permits them to process the information given by the teacher, and which improves their communication skill.

However, the classroom reality shows the opposite fact from the theoretical concepts. Most teachers are coping with students who are hard to understand the lessons having explained before. It is because they consider *Hiragana* reading and writing activities as useless materials. Also, this lesson sometimes hasn't gained serious attention from the teacher. The problems can be solved by applying the proper learning processes and continuous drills because a skill can only be effectively acquired by increasing drill and practise quantities.

¹ Mustakim, 1994: 1

² Sudjianto, 2002 : 83

³ Tarigan, 1994: 2

⁴ Dahidi, 2004:19

⁵ HG. Tarigan, 1986: 21

⁶ W.J.S Poerwodarminto, 1976: 71

⁷ HG. Tarigan, 1986: 2

This research emphasizes on *Hiragana* reading and writing skills because it is the most dominant type of letters used in Japanese learning at senior high school level. Theratically, the learning processes of *Hiragana* reading and writing processes have been conducted well and given equal attention as other foreign languages. However, one of obstacles that the teacher frequently faces is the complexity of the lesson. This becomes significant problem for the teacher because most students find *Hiragana* as a greatly difficult material to learn.

Having observing the learning processes in relation to their poor abilities in *Hiragana* reading and writing, the writer concludes that the tenth grade students of Cenderawasih Senior High School have the following problems, among others: (1) the students do not have good understanding towards *Hiragana* reading and writing skills; (2) the students feel that they do not get advantage from *Hiragana*, so they do not have strong motivation to learn it; (3) there are no adequate learning media for supporting their reading and writing learning processes; (4) the teaching techniques are monotonous so that the students easily get bored; and (5) the learning environment is not supportive.

The efforts for improving the student's reading and writing skills of *Hiragana* strongly need supporting media. It also needs the use of proper learning techniques to make the students performs the expected competencies and goals. Japanese language teaching and learning insists the teachers to apply efficient and effective learning techniques.

Based on the background above, the writer conducted a research entitled "Effectiveness of Jigsaw Technique Uses in Writing and Reading *Hiragana* Texts Classes of The Tenth Grade Students of *Cenderawasih 1* Senior High School of South Jakarta in 2011/2012 Academic Term".

Definition of Learning

Learning is mental process which occurs within someone. It stimulates behavior and activity changes because there is conscious interaction between someone and his/her surroundings.⁸ Surya also states that learning is an effort process conducted by an someone to achieve new holistic changes. In other words, learning is growths and changes within oneself embodied in term of attitude changes due to experiences or practices.

According to Bakri, learning is a conscious activity to gain values from the material being learned.⁹ In accordance to Bakri, Sadirman states that learning is a sequence of phisycal and psychological activity to achieve total development of human's personality including creative, aesthetical, and thought aspects and also cognitive, affective, and psychomotoric development.¹⁰

Thus, learning is changes occuring within oneself which can be observed from behavior and respond changes towards every single event happening at his/her surrounding as a sequencial part of physical and psychological activities moving towards total personality development.

Definition of Learning Outcome

Soedijarto states that learning outcome is a mastery level achieved by a student enrolling in a teaching and learning process based on a set of educational standard.¹¹ Moreover, Rogers also states that learning outcome is the ultimate learning process, mainly based on teacher's evaluation. The outcome can be embodied as learning effect and follow-up effect. While Nana Sudjana in his definition about the nature of learning outcome states that learning outcome is behavior changes including cognitivem affective, and psychomotoric.¹²

The success of learning achievement depends on how the process experienced by the student is. The achievement can be gained through learning evaluation. So does for *Hiragana* in which the learning outcome is achieved after the students conduct all learning processes. At this phase, they will gain the insights on how far the learning objectives have been reached.

Definition of Writing

According to Hasani, writing is a language skill used for indirect communication. Writing is a productive and repressive activity, so a writer must be able to take advantage and to use mechanics, grammar, and vocabulary well.¹³ Lado in Suriamiharja also states that writing is to place graphic symbols describing a language which other people can understand.¹⁴

In Japanese, alphabetical symbols are divided into three, i.e. *Hiragana*, *Katakana*, and *Kanji*. In this research, the writer only discusses *Hiragana*. Writing *Hiragana* needs a specific skill mastered through frequent practice. by mastering this kind of graphic symbol, students will be able to develop their knowledge, such as expressing their ideas in a text.

Nature of Reading Alphabetical Symbols

⁸ Sanjaya, 2007: 16

⁹ Bakri, 1994: 47

¹⁰ Sadirman, 2000: 33

¹¹ Soedijarto, 1993: 43

¹² Sudjana, 1989: 3

¹³ Hasani, 2005: 2

¹⁴ Lado (in Suriamiharja, 1996: 1

Reading means observing information from texts, both written and graphic symbols. Reading is a skill to recognize and understand written forms and their changes towards oral symbols through silent reading or reading aloud.¹⁵ Hodgson in Tarigan states that reading is a process conducted and used by a reader to get messages delivered by a writer through written symbols.¹⁶

Hiragana

Japanese has three types of letters, namely Kanji, Katakana, and Hiragana. Hiragana is a way to write Japanese language and it represents on syllable. All Hiragana letters symbolize all sounds occurring in Japanese. Therefore, actually the language can have been written using Hiragana. Since it doesn't have space, however, it merely produces unreadable sentences. Hiragana carries the following functions:

- It is used for writing the words which do not exist in Kanji or which are never used.
- Because of its simplicity, some children's books and *mangas* frequently use Hiragana.
- It functions as *furigana*, that is, superscript writing above Kanji letters to make it easy to read.
- It functions as *okurigana*, that is, the letters with bolds and underlines.
- It is used for stating adverbs, nouns, and adjectives.

Actually, long time before, Japanese people didn't have alphabet. They, then, adopted Mandarin. The adopted alphabet was further developed into Kanji which was also further simplified into Hiragana. It was because of the complexity of Kanji, so it demanded specific skill to write. Kanji also has a large number of letters. Formerly, Hiragana was only used by women, so it is called *onna de* (女手) or women's writing (*ishida*).¹⁷ The following table shows the origin of Hiragana.¹⁸

あ (安)	い (以)	う (宇)	え (衣)	お (於)
か (加)	き (畿)	く (久)	け (計)	こ (己)
さ (左)	し (之)	す (寸)	せ (世)	そ (曾)
た (太)	ち (知)	つ (川)	て (天)	と (止)
な (奈)	に (仁)	ぬ (奴)	ね (祢)	の (乃)
は (波)	ひ (比)	ふ (不)	へ (部)	ほ (保)
ま (末)	み (美)	む (武)	め (女)	も (毛)
や (也)		ゆ (由)		よ (与)
ら (良)	り (利)	る (留)	れ (礼)	ろ (呂)
わ (和)				を (遠)
ん (妖)				

Froms of Hiragana

Hiragana is a type of letters having one or two syllable in *romaji*, such as:

¹⁵ Kindaichi, 1978: 237

¹⁶ Hodgson (in Tarigan, 2008: 7

¹⁷ Sudjianto dan Dahidi (2004:72

¹⁸ Katoo, 1991:227

あ (a)	い (i)	う (u)	え (e)	お (o)
か (ka)	き (ki)	く (ku)	け (ke)	こ (ko)
さ (sa)	し (shi)	す (su)	せ (se)	そ (so)
た (ta)	ち (chi)	つ (tsu)	て (te)	と (to)
な (na)	に (ni)	ぬ (nu)	ね (ne)	の (no)
は (ha)	ひ (hi)	ふ (fu)	へ (he)	ほ (ho)
ま (ma)	み (mi)	む (mu)	め (me)	も (mo)
や (ya)		ゆ (yu)		よ (yo)
ら (ra)	り (ri)	る (ru)	れ (re)	ろ (ro)
わ (wa)	を (wo/o)			ん (n/ng)

Hiragana is formed from lines or parabolic lines (*Kyokusenteki*), while Katakana is formed from straight lines (*Chokusenteki*).¹⁹

Jigsaw Technique

Jigsaw technique was developed by Elliot Aronson as a Cooperative Learning model. It is used in reading, writing, listening, and speaking teaching activities. Jigsaw cooperative learning is a cooperative learning type which consists of some members in a group having responsibility to understand part of a lesson and then teach the material to another member within his/her group.²⁰ The groups in Jigsaw are divided into domain and expert groups. Domain group is the unity of some experts, while expert group is the group consisting of some students who must learn and complete the assignments of a particular topic and then explain it to their domain groups.

In Jigsaw, students learn in some small groups consisting of 4 to 6 heterogen members. They work together in a mutual dependency and are responsible to the completion of a particular lesson which further needs to be delivered to the other members.²¹

The technique is designed for improving the students sense of responsibility towards his/her learning and towards the others. The student doesn't only learn the lesson given to him/her, but also he must be ready to deliver and teach the lesson to other members in his group. Thus, the students have mutual relationship and should work together cooperatively to learn the material given by the teacher.²²

Each group delegates one of their members to sit in the expert group. Within this group, they will discuss the topic given by the teacher. The delegates, then, will return to their domain groups to explain what they have discussed and learned within the expert group to other members. In addition to the groups in Jigsaw, there are two types of groups, i.e. domain and expert groups. The former consists of some members having different family background, while the latter is a combination of some experts. The expert group consists of some members of domain groups chosen for understanding and discussing a particular topic and then completing the exercises related to the topic. As they have finished doing the discussion and completing the assignment, they return to their domain groups to explain the results of their discussion. Arends illustrates the relationship between domain and expert groups as follows:²³

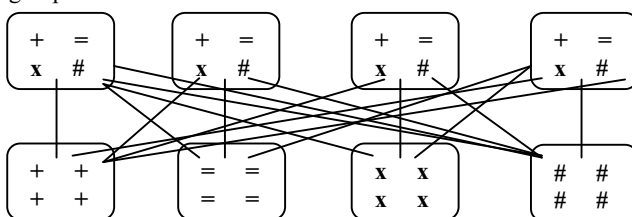


Figure 1. Domain and Expert Groups Relationship

The followings are some steps to implement Jigsaw technique:

- Teachers split the classrooms into some groups consisting of 4 to 6 students for each depending upon the number of lessons to discuss. The groups are then called as domain groups. Every member is assigned to do one of the lessons given. Every student with the same lesson, then, gathers in the groups which are called as

¹⁹ Iwabuchi) dalam Sudjianto dan Dahidi (2004:72

²⁰ Arend, 1997: 87

²¹ Arends, 1997:87

²² Anita Lie, dalam Nana, 1997:64

²³ Arends, 1997:105

expert groups or counterpart group (CG). Within the expert groups the students discuss the same material and arrange a plan on how to deliver it to other members in their domain groups. Aronson calls the domain groups as Jigsaw groups.

- b. As the students have discussed the material in the expert groups, then, they conduct a presentation within their domain groups. Or, a group can be chosen to present the material in front of all groups in the classroom in order to gain the same perception.
- c. Teachers give a individual quiz for each student.
- d. Teachers give reward to the groups according to the scores gained by each member.
- e. It is suggested that the lesson can be divided into some learning materials.
- f. It needs to remember if the teachers want to give a new lesson, they should prepare the guidance and the sequential order of the material to achieve the learning objectives.

In general, the advantages of Jigsaw Cooperative Learning are:

- a. Students are in mutual dependence to each other.
- b. There is recognition towards diverse perspectives among each student.
- c. All students get involved in planning and maintaining the learning processes.
- d. Classroom's situation is relaxing and enjoyable.
- e. There is friendly relationship among teachers and students.
- f. All students have opportunity to express their feelings.

However, there are some drawbacks of this technique, among others:

- a. Teachers should prepare the learning process well. The technique also requires more energy, time, and effort.
- b. Proper facilities, tools, and sufficient amount of money need to be provided to make the process run well.
- c. During the group discussion, there is a tendency that the topic may grow wider, so it may exceed the time limit.
- d. The discussion may also be dominated by a particular student, so the weak students become passive.

EXPERIMENTAL

The method used in this research is pure experiment. It aims to investigate cause and effect relationship by exposing one or more experimental groups and one or more experiment conditions. The result will be compared to the control group²⁴. The writer uses two classes, namely experiment class and control class. The former uses jigsaw technique, while the latter doesn't. Jigsaw is more effective and interesting for Hiragana reading and writing classes than other techniques. In this research, the writer uses experimental method because the writer gives treatment or control towards the variables. The research steps are as follow:

Planning

The followings are the steps to collect data of the research:

- a. Preparing research instruments-The researcher prepares the lesson plan, pre-test instrument, and post-test instrument.
- b. Preparing administrative requirements-The researcher prepares all documents and letters related to the administrative requirements of the research.

Collecting Data

The researcher prepares the teaching process, including setting the teaching objectives, preparing the materials, choosing the methods and media, and also the evaluation.

- a. Learning Objective-The learning objective is to make the students able to write and read Hiragana letters by understanding, appreciating, and interpreting the materials given by the teacher using Jigsaw technique.
- b. Learning Material-The material is simple writing and reading.
- c. Method and Media-The method is Jigsaw and the media is hiragana letter cards.
- d. Evaluation-The evaluation is used to observe the effectiveness of the method used in the learning process. The evaluation is conducted through *pre-test* and *post-test*.

Design of Hiragana Writing dan Reading for Experiment Class

- a. Learning Material-The material is simple reading and writing taken from *Sakura 1* published by *The Japan Foundation*.
- b. Learning Method-The learning technique used in the experiment class is writing and reading activity using Jigsaw
- c. Learning Media-The media for the experiment class includes book and letter cards.

²⁴ Danim, 2002: 43

- d. Evaluation-The evaluation is conducted by means of written tests, i.e. pre-test and post-test.

Design of Hiragana Writing dan Reading for Experiment Class

- a. Learning Material-The material is simple reading and writing taken from *Sakura 1* published by *The Japan Foundation*.
- b. Learning Method-The learning method uses mixed method, that is, writing and reading of what the teacher writes and says.
- c. Learning Technique-The learning technique is demonstrative.
- d. Learning Media-The media for the experiment class includes book and letter cards.
- e. Evaluation-The evaluation is conducted by means of written tests, i.e. pre-test and post-test.

Research Variables

There are three variables used in this research, namely writing skill, reading skill, and Jigsaw technique.

Writing Skill

Writing is the ability to draw graphic symbols for conveying idea understood by others.

Reading Skill

Reading is a skill to recognize and understand written forms and their changes towards oral symbols through silent reading or reading aloud.

Variabel Teknik Jigsaw

Jigsaw technique was developed by Elliot Aronson as a Cooperative Learning model. It is used in reading, writing, listening, and speaking teaching activities. Jigsaw cooperative learning is a cooperative learning type which consists of some members in a group having responsibility to understand part of a lesson and then teach the material to another member within his/her group.²⁵ The groups in Jigsaw are divided into domain and expert groups. Domain group is the unity of some experts, while expert group is the group consisting of some students who must learn and complete the assignments of a particular topic and then explain it to their domain groups.

Research Instrument

Forms of Instrument

The instruments used in the research are as follow:

Pre-test

The pre-test consists of 10 multiple choice items and 10 essay items. The test is used for observing the prior skill of the students.

Post-Test

The post-test consists of 10 multiple choice items and 10 essay items. The test is used to examine the learning outcome.

Questionnaire

The questionnaire is given for the experiment class after completing the post-test in order to recognize their responses toward the learning process using Jigsaw.

Test Score

The score is based on the following scales:

80 – 100 is excellent

60 – 79 is good

40 – 59 is bad

0 – 39 is poor

Data Collection Method

Preparation

The first step the researcher do is creating the instruments.

Implementation

- a. The research is conducted directly by the researcher in the classroom.

²⁵ Arend, 1997: 87

- b. The test in the experiment class is conducted using Jigsaw, while in the control class isn't.
- c. Scoring
- d. The scoring is conducted based on the results on the *Pre-Test* and the *Post-Test*.

Data Analysis

The procedures of data analysis include:

- a. Collecting data from the *pre-test* and the *post-test* results of the experiment and control classes.
- b. Calculating the post-test and the pre-test average scores of both the experiment and control classes.

$$\text{Average Score} = \frac{\sum \text{Student score}}{\text{Total number of students}}$$

- a. Creating the frequency distribution score table of the pos-test.
- a. Creating block diagram of the post-test.
- b. Testing the hypothesis using t test for both variables and conducting normality and significance test using *Lilliefors*.

RESULTS AND DISCUSSION

The data analysis shows that the tvalue is 10,86, while the tTable, with the freedom degree of 53 and the significance level of 0,05 is 1,67. Therefore, it is noted that tvalue 10,86 > t tabel = 1,67. It means that H₀ is rejected and H₁ is accepted. Consequently, it is concluded that there is significant relationship between Jigsaw technique and the learning outcomes of hiragana reading and writing.

CONCLUSION

Jigsaw technique is effective for improving student's learning outcomes in Hiragana reading and writing. It is shown by the average post-test score of the experiment class, which is 8,42, and the control class score, which is 6,52. The technique plays important role because it is a cooperative learning model which can improve the reading and writing skills. There is significant relationship between the technique and the learning outcome of the reading and writing classes. It is shown by the fact that the t_{value} (10,86) is greater than the t_{Table} (1,67), so H₀ is rejected and H₁ is accepted. The research finding also shows that the classroom learning process is more interesting by applying the technique.

ACKNOWLEDGEMENT

We are grateful for the research grant to all parties for the completion of this research.

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