Implementation of Word Square Learning Model in Vocabulary Learning (adjectives and nouns) Japanese Language in 11\textsuperscript{th} Grade Students at YADIKA High School, Langowan District

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ABSTRACT

Teacher Deployment Program Activities in Schools (PDS) are very beneficial for the lecturers and the school as well as LPTK. The Teacher Deployment Program in Schools (PDS) has a symbiotic nature of mutualism, meaning that it benefits both parties, both the school and the Lecturer and LPTK. An innovative learning model that can encourage students' understanding of Japanese vocabulary mastery. One form of innovative learning models is the Word Square learning model. Word Square learning model can be used to encourage students 'understanding of the subject matter, can train students' discipline, can train their attitudes carefully and critically and can stimulate students to think effectively. Of the 20 students who were tested in the pre-test before applying the Word Squared learning model in studying Japanese vocabulary can be seen from the results of the average grade of 49.5. Whereas after using the Word Square learning model, the progress of learning outcomes is so well evidenced by the average grade of the post-test that reaches 90.15. This proves that the application of the Word Square learning model in learning Japanese vocabulary plays a big role in a teaching and learning system, especially for education.

Keywords: Japanese, Language, Word Square Learning Model

INTRODUCTION

Reliable human resources are the result of a quality education and learning process organized by a great and qualified teacher education institution or the Education Personnel Education Institution (LPTK) which is the main determinant of the progress of a nation. LPTK is a tertiary institution assigned by the Government to organize teacher procurement programs in early childhood education through formal education, basic education and / or secondary education, as well as to organize and develop educational and non-educational knowledge. LPTK's role is: (1) producing qualified teachers (qualifications, competencies, strong character and educator spirit); (2) produce prospective teachers in numbers according to the needs to ensure the implementation of education that meets the standards in each education unit for various lines, types and levels of education.

But in reality the presence of more than 400 LPTKs in Indonesia, has not been able to solve the problems of Indonesian teachers who are very complex, namely; (1) lack of teachers, especially teachers in special areas; (2) disproportionate distribution; (3)
mismatched between educational background and the task at hand; (4) academic qualifications and teacher competencies are partly below standard; (5) quality or competence disparities; (6) teacher welfare has not been evenly distributed; (7) governance and incentive systems that are unfair and not adjusted to work performance; and (8) teacher performance and achievement is low, because incentives are not effective in improving teacher performance. At present LPTK experiences various problems, including: (1) not all LPTKs have met the standard; (2) quality disparity due to lack of control of the number and quality of LPTKs; (3) over supply of graduates of undergraduate academic education, so that many LPTKs produce educated unemployment; and (4) there is a lack of attention from the government, both the central government and regional governments, to LPTK.

With the issuance of the Ministry of Higher Education Research and Technology Regulation No. 44 of 2015 it is necessary to adjust some academic references including curriculum adjustments. Specifically in the management standards of higher education learning should be; (1) formulating policies, strategic plans, and operations related to learning that can be accessed by academicians and stakeholders, and can be used as a guideline for study programs in implementing learning programs, (2) organizing learning in accordance with the types and educational programs that are consistent with the achievements graduate learning, (3) maintaining and improving the quality of study program management in implementing learning programs on an ongoing basis with targets that are in line with the vision and mission of the tertiary institution, (4) monitoring and evaluating the activities of the study program in carrying out learning activities, (5) having guidelines for planning, implementing, evaluating, supervising, quality assurance, and developing learning activities and lecturers, and (6) submitting a report of study program performance in conducting learning programs at least through the education database.

As the explanation above illustrates the importance of managing the quality of graduates as prospective teachers who are able to compete in the labor market. In managing prospective teachers who are experienced in the field of learning in schools there needs to be a breakthrough that is of positive value (Maru and Pantas, 2019). One of the efforts that need to be developed to enhance the experience of the prospective teachers in schools that LPTK lecturers should also be a model for prospective teacher.

Therefore, lecturers must be able to provide good examples for prospective teacher students, in carrying out their professional duties, including how to carry out learning in class. In order for LPTK lecturers when they are carrying out learning tasks to be able to present real experiences of how to carry out good learning, which is relevant to the demands of the quality of the learning process in schools, the lecturer must experience firsthand how to become a "teacher" through a staff employment program (PDS). PDS is an activity that has a positive impact both for LPTKs and for Laboratory Schools and / or Partner Schools. The PDS program requires the commitment of lecturers to experience and become teachers in Laboratory Schools and or partner Schools.

In this partnership program, LPTK lecturers will be assigned to laboratory schools or partner schools to work together to improve forms of reinforcement on the quality of learning. The form of strengthening partnerships is carried out in a number of programs that are synonymous with both LPTK and partners with indicators of success; 1) Implementation of PDS through the preparation of collaborative learning tools between
lecturers and partner teachers, collaborative learning as evidenced by audio-visual recordings of collaborative learning processes, and gaining good experiences and reporting them into writing good experiences of PDS programs. 2) The implementation of assistance in achieving the quality of learning through PDS with a better learning climate, the production of increasingly quality learning tools, and increasing student learning achievement. 3) The creation of a true partnership between LPTK lecturers and Laboratory School teachers and / or Partner Schools, which is characterized by follow-up programs in improving the quality of learning in various forms and ongoing, as well as strengthening partnerships in implementing PPL.

Purpose of PDS Implementation
Teacher Deployment Program in School (PDS) aims:
1. Providing opportunities for lecturers to gain first-hand experience of teaching and learning situations in schools and factors that influence the quality of the process and learning outcomes of elementary, junior high and high school / vocational / MA students.
2. Improving the technical ability in terms of didactic and methodical teachers to improve the quality of the teaching and learning process as a whole (more specifically for the latest learning models).
3. Increasing mastery of subject matter related to this program at elementary, junior high and high school / vocational / MA levels. Specifically, the implementation of learning will be prepared to increase the level of scientific literacy in basic education to support the improvement of the PISA and TIMSS ratings.
4. Prepare an attractive and information-intensive learning media in an effort to support teacher professionalism and improve student learning outcomes.
5. Carry out research and development activities to enrich scientific aspects and improve the suitability / relevance of LPTK curriculum and the needs of stakeholders in the field (link and match).
6. Implement KKNI-based curriculum revisions as well as its linearity with the needs of the school and its relevance to the learning material that will be provided to students.
7. Train Unima students in the Education Study Program to get to know the world of their work through the PPL Program, Thematic Education Community Service Program, Problem-based Thesis Writing Program in schools and other graduate quality improvement programs.
8. Giving Unima Lecturers the opportunity to carry out Research and Community Service through collaboration with schools involved in this program.
9. Become a facilitator in KKG activities for elementary school teachers and MGMP for high school / vocational / MA teachers in all partner schools and teacher groups at the sub-district and district / city level (expanded).
10. Collaborating with teachers to carry out Classroom Action Research as a vehicle for enhancing teacher professionalism and teacher career selection, especially for group.

RESEARCH METHOD

Study Programs and Subjects for PDS
Subjects taught in the PDS program at partner schools are Japanese Language Education
Laboratory Schools and / or Partner Schools
The partner school where the PDS program is implemented is Yadika Langowan High School, address Waleure, Langowan Timur District, Minahasa Regency, Sulawesi. This school is under the ownership of the Jakarta Abdi Karya Education Foundation (YADIKA), which is engaged in education and the school is accredited A, NPSN Number: 69822741.

PDS Lecturer
Lecturers who carry out the tasks in implementing the PDS program are 1 (one) person. The lecturer names are Sandra Rakian, S.Pd, M.Pd who are daily teaching staff in the Japanese Language Education Study Program at Manado State University (UNIMA).

School and Class Orientation
YADIKA Langowan High School, is one of the Private High Schools in the Province of North Sulawesi, Indonesia. Just like high school in general in Indonesia, the period of school education at YADIKA Langowan High School was taken in 3 years from class X to XII. YADIKA Langowan High School was established based on Foundation Decree Number. 233 / SK / BP-YAK / IV / 2013. The budget for the construction of the School came from the Foundation. Inaugurated on August 29, 2013, by the Governor of North Sulawasi namely Bpk. DR. S. H Sarundayang.

Learning Activities
The program of lecturers in this school is carried out through 2 types of activities namely; Manage learning and help overcome various learning problems.

a. Manage Learning
Steps or stages that have been taken during the implementation of the activities to support the teaching program, namely:

A. Preparation or Planning Stage
The initial stage is planning / teaching material preparation. Based on the preparation of the planned learning previously sought so that the implementation of learning in accordance with the objectives to be achieved. In general, the steps for implementing learning are: initial activities, core activities and final activities. Provision of learning materials tailored to the sequence that has been programmed systematically in the preparation phase.

The planned learning activity is Japanese subject matter how to introduce families in which to learn adjectives. Learning material is presented using laptop media, props (photos, worksheets of square cards containing letters / words) and LCD. In the early stages of implementation I communicated with school leaders to ask permission to carry out this PDS program, then face to face with the class teacher asking what were the problems experienced when learning took place, and face to face with students, through that meeting I gave an explanation of the scope of the material and explained the activities that will be followed during the learning process are guided by the preparation of the teaching that has been made.
B. Implementation Stage
The core activity carried out is to explain the whole material through the LCD, photos and pictures in accordance with the material provided, after the explanation provides examples of how to use the word square learning model, giving students instructions on how to match the answers to the boxes inside which contain answers similar to puzzles crosses. And at the end of the evaluation activities and provide feedback and assessment.

In order for the learning process to take place effectively and efficiently, it is necessary to pay attention to the learning objectives, the media used by laptop, teaching aid and LCD that will support the learning process, the number of students who will take the lesson, the time / hours to be used, the source of the material used. The teaching and learning process can run effectively if all the influential components support one another in order to achieve the goals. For example, student interest, student motivation, teacher methods must be varied and teacher techniques in teaching also in the class affect the student's learning process and outcomes. If the method used in delivering certain materials students are enthusiastic to learn because students are motivated. One learning model that can be applied in schools is the word square model.

Word square learning model is a collection of random letters that will form a word arranged in square boxes that can be read forward and backward. Word Square is almost like filling in a crossword puzzle but the difference is that the answer is already there but is disguised with an additional box with any letter / number impersonator or deception. The purpose of the deception is not to make it difficult for students, but to test foresight to practice meticulous and critical attitude. This Word Square learning model aims to encourage students to be more active in participating in the learning process and also aims to practice student concentration. The main instrument of this learning model is an activity sheet or a Word Square worksheet. LKS (Student Worksheet) Word Square is one of the tools/medias in the form of questions or sentences that need to be found in the random order of letters in the column provided.

Steps in the Word Square learning model, among others:
  a. The teacher conveys the material in accordance with the competencies to be achieved.
  b. The teacher distributes activity sheets or work sheets.
  c. Students answer the questions, then shaded the letters in the boxes according to the answers horizontally, vertically, or diagonally.
  d. The teacher divides the groups and gives the activity sheets / worksheets
  e. The teacher gives points to students / groups for each correct answer in the box.

Example of Word Square

| お | お | き | き | あ | い | ふ | る | い | う |
|---|---|---|---|---|---|---|---|---|---|
| え | お | か | き | く | け | こ | さ | し | ひ |
| ち | す | あ | た | ら | し | い | こ | あ | ろ |
| せ | い | も | そ | た | ち | つ | か | て | い |
| な | に | さ | ん | ね | の | る | は | く | を |
| き | ひ | ふ | い | へ | い | ほ | ら | ま | せ |
The learning model using the word square method in Japanese subjects with material introducing the "watashi no kazoku" family is expected to increase the enthusiasm of learning and learning outcomes of Yadika Langowan high school students. This learning model uses the student worksheet media in the form of pictures by means of the students shaded the letters in a box according to the answers either horizontally, vertically or diagonally. In this way students are expected to be able to think logically so that learning becomes meaningful.

**Weaknesses and Strengths of the Word Square Learning Model**

The advantages of the Word Square learning model, among others:

1. Encourage students’ understanding of the subject matter.
2. Practicing a careful and critical attitude.
3. Practicing a disciplined attitude.
4. Stimulate students to think effectively.

As for the shortcomings of the Word square learning model, among others:

1. Less stimulate student creativity.
2. Learning is relatively one-way.

To overcome the above deficiencies, the teacher forms groups of students, through groups that have been formed, the students can be creative and can develop their potential, the teacher assigns students to make their own worksheets by modifying worksheets made in the form of drawings as interesting as possible to be done in groups, after that the groups swap their worksheets with other groups to work on. Through these activities, students will explore creativity and potential. After that the teacher gives the opportunity to the group to deliver their result.

The sub material provided from the Japanese language material is:

1. Kore wa chichi desu
2. Chichi wa yasashii desu
3. Chichi wa supotsu ga suki desu

**C. Assessment Stage (Evaluation)**

This section is to find out how far mastery of the material has been well received by students. To see the results, a pretest or posttest was held. The types of tests that have been carried out are written tests, oral examinations, exams choosing alternatives from various possibilities (multiple choice tests) and examinations choosing alternatives from two true or false possibilities (true false test) based on the stated learning objectives.

**D. Help Overcome Various Learning Problems**

The things done in overcoming the learning problems experienced by students, among others:

a. Teaching improvement: Teaching improvements have been made to correct; teaching becomes even better. It is more focused on materials, methods and their implementation.
b. Enrichment activities: Enrichment activities are given to students in the form of additional assignments to add to their maximum knowledge and skills.

c. Increasing learning motivation: One of the activities in helping to increase learning motivation is to create a learning atmosphere that is challenging, stimulating and fun. Other than that teacher should give some gifts and penalties that are guiding

d. Improving learning skills,

e. Developing good attitudes and study habits

RESULTS AND DISCUSSION

Teacher Deployment Program Activities in Schools (PDS) are very beneficial for the lecturers and the school as well as LPTK. The Teacher Deployment Program in Schools (PDS) has a symbiotic nature of mutualism, meaning that it benefits both parties, both the school and the Lecturer and LPTK (as the spearhead of Instructional quality improvement). Through the advantages for the lecturers and LPTK, it can be seen from: 1) an empirical picture of the real conditions in schools, so that they can be a material to be given to students. 2) Lecturers can implement innovations that emerge in Higher Education properly, so as to reduce the challenges and shortcomings that exist. 3) Lecturers obtain additional knowledge as a foundation to strengthen PPG (Teacher Professional Education) which is the last line as a professional teacher printer. 4) Lecturers get input from various situations and school conditions. Lecturers gain new experiences on how to adapt to different environments to be accepted in all circles. 5) Lecturers gain experience on how to make an innovation well received without any significant resistance. 6) LPTK gets harmonious partners for various advanced programs that may exist.

The advantages for the partner schools namely: 1) teachers get learning innovations brought by the lecturers to school, 2) teachers get the knowledge that to do a good learning is not only enough by trial and error, but there must be a theoretical basis for doing various things at school, 3) lecturers can be agents of change in various management systems, ranging from curriculum, administration, and various other governance, so as to improve school quality, and 4) lecturers able to transmit Lesson Study that apply the principle of Continuous Improvement, as a form of continuous improvement of learning in schools, and 5) teachers in the field can get new knowledge about the application of the latest technology in schools, so that technology, content, and teaching science can also be developing.

A brief overview at the implementation stage of learning Japanese material is as follows:
The core activity carried out is to deliver the competencies to be achieved and then present the material as an introduction, followed by distributing worksheets to individual students related to the material. The next activity provides the opportunity for students to shade the answers that are considered correct according to the material. The end of this activity is checking the student worksheet (LKS) in accordance with the subject matter and providing an evaluation (test).

In other activities, the teacher divided small groups and then assigned a task to these groups to be able to make word square / word square, after each group that was already made exchanging worksheets, also given time for each group to first make the next fill in the square word in the form of worksheets made by each group. The end of
this activity also concludes the learning material and provides an evaluation (test). In this activity students looked more enthusiastic and eager in participating in learning because it is considered interesting learning by using word square.

From the total of 20 students who take part in learning in class can be seen through the columns below the average value of pre-test and post-test.

**Average Pre-test and Post-test scores**

| NUMBER | Student (initial name) | Pre-Test Score (X) | Post-Test Score (Y) | Difference Gain (d) (Y-X) |
|--------|------------------------|--------------------|---------------------|--------------------------|
| 1      | S.L                    | 45                 | 98                  | 53                       |
| 2      | U.O                    | 60                 | 99                  | 39                       |
| 3      | A.K                    | 59                 | 78                  | 19                       |
| 4      | T.K                    | 35                 | 76                  | 41                       |
| 5      | C.P                    | 30                 | 83                  | 53                       |
| 6      | F.M                    | 41                 | 96                  | 55                       |
| 7      | F.T                    | 60                 | 99                  | 39                       |
| 8      | G.R                    | 58                 | 85                  | 27                       |
| 9      | G.M                    | 40                 | 80                  | 40                       |
| 10     | H.P                    | 35                 | 98                  | 63                       |
| 11     | J.R                    | 60                 | 100                 | 40                       |
| 12     | Y.M                    | 59                 | 99                  | 40                       |
| 13     | M.G                    | 40                 | 80                  | 40                       |
| 14     | M.P                    | 60                 | 100                 | 40                       |
| 15     | P.M                    | 33                 | 76                  | 43                       |
| 16     | P.S                    | 45                 | 80                  | 35                       |
| 17     | E.N                    | 58                 | 96                  | 38                       |
| 18     | S.K                    | 60                 | 99                  | 39                       |
| 19     | V.L                    | 45                 | 85                  | 40                       |
| 20     | P.L                    | 58                 | 96                  | 38                       |
|        | **N=20**               | **Σx = 981**       | **Σy = 1803**       | **Σd = 822**             |

Data processing starts from the calculation of the average (mean) of each variable which is then continued with the calculation of the significant level between the two variables. The following is the explanation explained in detail.

1) **Average pre-test score (T1)**

\[
\bar{x} = \frac{\sum x}{N} = \frac{981}{20} = 49.5
\]

2) **Average post-test score (T2)**

\[
\bar{y} = \frac{\sum y}{N} = \frac{1803}{20} = 90.15
\]
From the results of the average score (mean) on each of these variables shows that the average pre-test value of only 49.5 rose to 90.15 at the time of the post-test.

The use of the Word Square learning model is one of the supporting factors of learning outcomes in the classroom, especially in Japanese vocabulary learning. This is tested because there are differences before the Word Square learning model is given, the data obtained the average value of the pre-test in mastering Japanese vocabulary is 49.5. After being treated by applying the Word Square learning model, the level of mastery of student material increased to 90.5. The difference between the pre-test and post-test scores is 41. Based on the calculation results it can be seen that the value of \( t_{\text{calculation}} \) is greater than the value of \( t_{\text{table}} \), which is 19.29 > 1.72. Thus, the hypothesis in this study was accepted. So that students' abilities in learning Japanese Vocabulary have improved after being given learning by using the Word Square learning model.

There is a significant change between pre-test and post-test scores after being given treatment, using Word Square learning model in learning Japanese Vocabulary. Thus, this shows that learning Japanese Vocabulary, by using the Word Square learning model, can further improve students' Vocabulary mastery.

The use of word square learning models is just an effort to help teachers teach, but more than that as an effort to facilitate students in learning the material being studied. Finally, the word square model is very appropriate to be used by teachers, not just teaching aids for teachers, but it is hoped that new awareness will emerge that the word square learning model has become an integral part of the education system so that it can be utilized to the maximum extent possible to help smooth the tasks assigned to progress and improve the quality of students.

Picture 1. Teaching and learning activities through the PDS program

CONCLUSIONS

From the evaluation of the implementation of PDS program activities, it can be concluded that this program is very beneficial for all parties involved, including teachers, lecturers and LPTK as well as students. In particular, this program has had a positive impact including:
- The creation of a better learning atmosphere
- The result of learning tools is getting better
- Increased student learning achievement
- The existence of a true partnership between LPTK lecturers and teachers
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