LEARNING MODEL DEVELOPMENT OF TEAMS-GAMES-TOURNAMENTS (TGT)
IN LEARNING GERMAN VOCABULARY (WORTSCHATZ) FOR SENIOR HIGH
SCHOOL STUDENTS IN MAKASSAR

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Abstract
The purpose of this study was to develop a learning model of Teams-Games-Tournaments (TGT) in learning German vocabulary (Wortschatz). Specifically the study aims: (a) to find out the validity, practicality, and effectiveness of German vocabulary learning to improve students' vocabulary mastery; (b) to find out the effectiveness Teams-Games-Tournaments (TGT) learning model for German vocabulary learning. The subjects of this study were teachers and students of class XI at SMA 11 Makassar. The data were collected via implementation of learning model sheet, questionnaire, and test. Learning model development of this study was examined in terms of validity and effectiveness. Learning model development was designed using 4-d procedures; defining stage, design stage, development stage, and disseminate stage. The result showed that learning model of Teams-Games-Tournaments (TGT) in learning German vocabulary (Wortschatz) was valid, practical and effective. The validity of this model was; learning implementation plans (3.86), textbooks (3.58), student’s worksheets (3.78), and teachers’ handbook (3.84). By using t-test formula where t(10,128) > t(2,002) with alpha level (α) 0.05, showed the learning model of Teams-Games-Tournaments (TGT) was effective in learning German vocabulary.

Keywords: Teams-Games-Tournament (TGT), Four-D (4-D) models, German vocabulary (Wortschatz)

INTRODUCTION
German language has been chosen as one of the foreign languages that studied in high schools level in Indonesia. The purpose of teaching German in senior high school level is student and students can communicate both orally and in writing, or students are skilled in listening, speaking, reading, and writing. In order to achieve that, students need mastery German vocabulary. Vocabulary mastery is the most important thing to learn various language skills. With mastering vocabulary mastery, it is easier to master language skills. Vocabulary mastery contributes greatly to the process of learning German. Based on the observation from the observations in some senior high schools in Makassar, students seemed lack of vocabulary. This could be seen when students are asked to do practice questions, they immediately open the dictionary without tiring to analyze the questions. In other words, student still translated word by words not the meaning.

To overcome this problem, this study tended to develop a learning model of Teams-Games-Tournaments (TGT) in learning German vocabulary (Wortschatz). This
study examined the validity, practically, and effectiveness of this mode.

LITERATURE REVIEW

Definition of Learning Device Design

The term development of instructional systems (instructional system development) and instructional design (instructional design) is often considered the same or cannot be clearly distinguished in its use, although according to the meaning of the word (Harjanto, 2008: 95) there is literally a difference between the word "design" and "development". The word "design" means making sketches or patterns / outlines, or preliminary plans, while the word "development" makes it grow regularly to make things bigger, better, more effective and so on.

Design means the existence of a whole, structure, framework or outline, and sequence or systematic activities (Gagnon and Collay, 2001). In addition, the word design can also be interpreted as a systematic planning process carried out before the development or implementation of an activity (Smith and Ragan, 1993). Design means the existence of a whole, structure, framework or outline, and sequence or systematic activities (Gagnon and Collay, 2001). In addition, the word design can also be interpreted as a systematic planning process carried out before the development or implementation of an activity (Smith and Ragan, 1993: 4).

Learning is an activity that involves many components in community life. As stated by Sanjaya (2012: 51) "Learning is an activity that aims to teach students who involve various components". In line with this opinion, Chalil and Latuconsina (2008: 1) "Learning is the interaction between individuals and groups, in this case the teacher as an individual interacts with a group of students". The relationship with the interaction of Schelle et al., (2010: 14) added "Unterricht ist ein Interaktionsgechehen, in dem um um bestitnen Gegenstand geht, über den der eine unterrichtet und der andere unterrichtet wird". That is, learning is an interaction which discusses a particular theme that triggers someone to teach each other.

Crawford (2004: 116) defines a distinct systematic process through which evolves a superior instructional product as a delineated through an instructional design model. That is, learning design is a systematic process that produces a learning product ... through a learning design model.

While learning design is a lattice of the application of learning theory and learning to facilitate one's learning process (Reigeluth, 2012). Learning design is also defined as the process of formulating goals, strategies, techniques, and media.

Cooperative Learning Model Type Teams Games Tournament (TGT)

Slavin (2008: 163) explained that "TGT not only uses academic tournaments but also uses quizzes and individual progress score systems, students compete as representatives of their teams with other team members whose previous academic performance is equivalent to them". Taniredja (2013: 67) explains that "In the TGT learning model of students after learning in their groups, each group member will be met with other group members who have the same ability in a match or tournament".

The Nature of Vocabulary

The term vocabulary in Indonesian is parallel to the term vocabulary or lexicon. Talking about vocabulary means talking about a field of language called a lexicon or vocabulary. Lexicology or vocabulary science is the study of the ins and outs of words. Vocabulary is a passive or active word used in a language and has a specific meaning in accordance with the rules of certain rules.

Basically, vocabulary mastery is the ability to use vocabulary, both in oral and written form. Vocabulary mastery consists of receptive (accepting) mastery, that is when a person understands vocabulary through reading and listening activities, and is
productive (producing) when one can use vocabulary in terms of speech and writing.

Rastuti (2009: 3) argues that vocabulary is all words contained in a language, the wealth possessed by a speaker or writer, words used in certain fields of science, such as economics, social, education or physics. Furthermore, according to Tarigan (2011 : 3) vocabulary is words that are not easy to change or very few possibilities are collected from other languages. Furthermore Djiwandono (2008: 126) said that: "Vocabulary is a vocabulary of words in various forms which include: words that are loose or without affixes, and words that are a combination of the same or different words, respectively with its own meaning ".

Scholl (2007: 271) said that: "Als wortschatz bezeichnet man die Gesamtheit der Wörter einer Sprache; Gesamtheit der Wörter, die jemanden anwenden kann ". That is, vocabulary shows the whole words of a language; whole words that can be used by someone. Drowdowski (2003: 1454) limits the following terms: "Wortschatz ist 1) gesammheit der Worter einer Sprache; 2) ein einzelner Verfuegt: Actions (vom Sprecher, Schreiber, tatsächliche Verwendeter) passiven (vom Hoerer, Leser, Verstandener, aber nicht Verwendeter) " . The purpose of the statement is: 1) vocabulary is the whole word in a language; 2) vocabulary is all words available both active vocabulary and passive vocabulary used by speakers and listeners.

Speaking of mastery of language is very dependent on vocabulary mastery, because vocabulary mastery is one aspect of language skills. Tarigan (2011: 2) argues that "the quality of one's language skills depends on the quality and quantity of their vocabulary". The more vocabulary someone has mastered, the more likely it is to be skilled in language or in other words the skill or failure of someone using language can be seen from the vocabulary they use. The same thing was expressed by Silahidin (1991: 1) that: "vocabulary mastery plays an important role in the activities of speaking both oral and written". Based on the above understanding, it can be concluded that vocabulary is a collection of words that are owned or used by someone in language to convey ideas, ideas and feelings both as a speaker, listener, writer, and as a reader.

**Types of words in German**

There are several types of words in German according to Hidayat (2007: 14), among others: Verb (verb), Nomen (noun), Adjective (adjective), Adverb (adverb), Präpositionen (preposition), Konjunktion (conjunction).

**RESEARCH METHOD**

**Design**

The designed learning device consists of; a) Learning Implementation Plans (RPP), b) Teaching Materials (BA) designed based on the stages in the development of the TGT learning model, c) Student Worksheets (LKS), and Teacher Handbook (BPG). The research approach used in this study was a descriptive analytical approach, while the type of research includes the type of research and development (R & D) which refers to the 4-D learning device development model from Thiagarajan, Semmel and Semmel (Thiagarajan, 1974) that is defining (Define), Design, Development, and Disseminate. To find out the impact of using the German language vocabulary learning device (wortshatz) based on the TGT learning model, it was designed in the form of an experiment to compare the achievement of learning competence of students taught using the German vocabulary learning tool (wortshatz) based on the TGT learning model and German learning taught with learning commonly used by teachers (conventional).

**Subjects**

The subjects of this study were students of SMA Negeri 11 Makassar. This research was experimental, so the class is chosen randomly from 10 class XI in SMA Negeri 11 Makassar and class XI IPA 1 as the experimental class and class 2 IPA as the control class using a random technique.
Variables

The main variables examined in this study were teacher and student response variables in using German vocabulary learning tools (wortschatz) based on the TGT learning model.

Instruments

The research instruments in this study were: 1) test, 2) Observation Sheet of Teacher Activity, 3) Observation Sheet of Student Activity, 4) Questionnaire of Teacher Response, 5) Questionnaire of Student Response.

Data Analysis

Data obtained based on the model developed by researchers, aimed to analyze the effectiveness of the model. The data analysis conducted in this study was to revise the learning tools from the initial draft to the final draft by analyzing: expert validation data, student activity, teacher's ability to manage learning, implementation of learning tools, and students' mastery of teaching material.

RESULT AND DISCUSSION

Final Initial Analysis Results (Front-end analysis)

Based on the results of discussions with the German language teacher at SMA Negeri 11 Makassar about the German language learning activities at the school, information was obtained that the teacher applied German language learning with the lecture method and assignment, lack of German language learning materials both compulsory and supporting books, lack of understanding of up-to-date language learning methods and are relevant to teaching materials, lack of innovative media and still implementing good learning models so that interaction in the process of learning German, especially in vocabulary learning does not run optimally. In other conditions, the German vocabulary of students is still lacking, this condition seems bad on the achievement of students' German learning outcomes, especially in the German vocabulary mastery.

Student Analysis Results

The subjects of this study were students of Class XI Science Program I SMA Negeri 11 Makassar in the 2016/2017 school year with a total of 30 students selected randomly from the class. In this section, what was examined was: background of student knowledge, language used and level of students' cognitive development. The results of the study showed that students of class XI IPA 1 of SMA Negeri 11 Makassar studied the material of Die Kleidung which was a prerequisite for studying the material in high school. Even so, the teacher still needs to remind the material at the beginning of the meeting. The language used by students in the learning process is Indonesian and German.

Results of Material Analysis

The activities carried out in this step were identifying, detailing, and systematically arranging the main material that students learn, and then the material was arranged hierarchically. The subject matter in this study is the material "die Kleidung" in accordance with the content standards.

Results of Design

This stage aims to design a learning device prototype. The results at the design stage were four learning tools, namely Learning Implementation Plans (Lehrnskizze), Textbooks (Lehrnsbuch), Student Exercise Books (Übungsbuch), Teacher Handbook (Lehrhandbuch). Learning tools in the form of lesson plan, Textbooks, Student Worksheets, and the resulting Teacher Handbook was designed based on the TGT learning model.

Results of the Development Phase (Develop)

The development stage is the advanced stage of the defining stage and design stage and is the third stage of the 4-D (Four-D Models) model. The development stage aims to produce learning tools that have been revised and are feasible to be tested.
Activities carried out at this stage are: expert and practitioner validation, device readability simulation and testing.

**Disseminate Phase Results**

The equipment produced at the final stage of development, then disseminated or socialized in a limited way to German language teachers and students of SMA Negeri 11 Makassar. From the results of the dissemination, several suggestions were obtained and were used to revise the initial draft into a final draft as the final development of the device.

**Observation Results of the Ability of Teachers to Manage Learning**

Observation assessment was carried out by one observer on the teacher's ability to manage German vocabulary learning based on Teams-Games-Tournament (TGT) learning model. The procedure adopted is observing the teacher in managing learning and providing an assessment in accordance with the predetermined assessment score. Based on the results of data analysis, the teacher's ability to manage learning German vocabulary using the Teams-Games-Tournament (TGT) learning model was in the good category. The activities carried out by the teacher in the learning process at each meeting developed very well. The teacher started apply the things contained in the model

**Student Response Results**

The instrument used to obtain student response data is the student response questionnaire. This questionnaire was given to students after participating in learning activities using learning tools based on Teams-Games-Tournament (TGT) learning model in German vocabulary teaching to be filled in their opinion on the learning and learning activities. Students' responses to learning devices were divided into three aspects, namely the response to the implementation of learning, the response to Lernbuch, the students' response to the Übungsbuch.

Based on the results of data analysis showed the students' response to the implementation of learning by using the German vocabulary learning device based on Teams-Games-Tournament (TGT) learning model was very good. On average 92.83% of students stated that they were happy with the learning device, the subject matter, the learning atmosphere in the classroom, and the way the teacher taught. 86.33% of students stated learning tools, subject matter, learning atmosphere in the classroom, and the way teachers taught were considered new to them. 83.72% of students expressed interest in participating in the lesson as they had participated (learning vocabulary description of German based on Teams-Games-Tournament (TGT) learning model. 90.67% of students stated that teaching and learning activities using learning tools based on learning models Teams-Games-Tournament (TGT) attracted and felt there was progress after following the learning process 92.67% of students state agree if the teaching and learning activities of teachers use learning tools based on Teams-Games-Tournament (TGT) learning model.

**Validity of Learning Model**

Based on the results of expert validation it can be concluded that lesson plan, Student Exercise Books, Textbooks, and Teacher's Guidebook, as a whole have fulfilled the validity criteria. The assessment results of experts and practitioners in the field of German language education show that the German vocabulary learning device based on Teams-Games-Tournament (TGT) learning model in terms of all aspects can be stated to be very valid with their respective values: lesson plan (3.86), Books Teach (3.58), Student Worksheet (3.78), Teacher Handbook (3.89), although there are still suggestions for improvement that need to be considered for the perfection of the device developed. These suggestions include:

1. The design of learning devices developed must be adapted to the Teams-Games-Tournament (TGT) learning model so that it can be
distinguished from other learning devices.

2. Presentation of the material on the learning device must be adjusted to the learning device based on the Teams-Games-Tournament (TGT) learning model

3. After the revision, the German vocabulary learning tool based on the Teams-Games-Tournament (TGT) learning model can be used in the process of learning German in high schools and vocational schools.

Practicality of Learning Model

Theoretically, the results of the assessment of experts and practitioners in the field of German language education on the German vocabulary learning device based on Teams-Games-Tournament (TGT) learning model states that it is feasible to use in learning. Empirically, the results of observations on the learning tools by the observer stated that the learning device was well implemented during the trial. Based on the results of the observer's assessment, the learning device has fulfilled the practicality criteria.

Effectiveness of Learning Model

In accordance with the results of the pre-test students in the experimental class showed that the average value (mean) of students' vocabulary mastery was 55.33 and was still in the low category with the highest score of 70 and the lowest score of 46. The pre-test results of students in the control class showed value the average (mean) ability of students' vocabulary is 52.67 and the value was included in the less category which the highest value is 70 and the lowest value is 43.

Based on the average value of the experimental class students and control class students, when compared was 55.33> 52.67 and the difference was 2.66. Comparison between the experimental class and the control class has a small difference. Thus, the average value of the students in the experimental class and the average value of the control class students did not have a significant difference because of the small difference of 2.66, which means the level of students' understanding of the German subjects in the experimental class and the same control class (homogeneous )

Based on the post-test results of students in the experimental class showed that the average value (mean) of students' vocabulary ability was 75.40 and was well categorized with the highest value was 83 and the lowest value was 70.

Based on the results of the post-test students in the control class showed the average value (mean) of students' language skills was 60.00 and the value was categorized sufficiently the highest value was 70 and the lowest value was 43. In accordance with the average value of the experimental class students and control class students, when compared is 75.40> 60.00 and the difference was15.4. Comparison of the experimental class and the control class has a big difference. Thus, the average value of the experimental class students and the average value of the control class students had a significant difference because of the large difference of 15.4, which means the development of German vocabulary learning devices based on the Teams-Games-Tournament (TGT) learning model more both from the previous learning model.

Before testing the hypothesis, homogeneity is tested first. In the homogeneity test, the data taken are the pre-test results of students in the experimental class and the control class. The aimed was to find out the students' initial abilities. In the experimental class shows the variance is 52.89, while the control class variance was 48.22. In accordance with the test criteria, the result was F count is smaller than Ftable ie Fcount 1.159 ˂ Ftable 6.388, so it can be concluded that the two pre-test samples are declared homogeneous.

After testing homogeneity, data normality tests were also carried out. In testing normality, the data was taken from the data of students' pre-test and post-test values in the experimental class and control class. This test was conducted to see whether
the data obtained is normally distributed or not.

The result of the normality test of the experimental class pre-test data shows that the experimental class data had a calculated square smaller than the square of the table, X counts < X table, that is -36.20 < 9.49. These results indicated that the experimental class data was normal. The results of the normality test of the control class pre-test data showed that the experimental class data has a calculated square less than the square of the table, X counts < X table which is -33.38 < 9.49, so that the data was normal.

The results of the normality test of the experimental class post-test data showed that the experimental class data had a calculated square that was smaller than the square of the table, Xcounted <Xtable, namely -30.98 < 9.49. These results indicate that the experimental class data was normal. After the results of the above analysis, continued with the t-test to see the final results of this study. The result was th (10,128)> tt (2,002). Thus, it means that the results of testing the effectiveness of learning devices showed that there were significant differences between the German vocabulary learning model based on Teams-Games-Tournament (TGT) learning model and conventional learning models.

In accordance with the results of testing the hypothesis above, it can be concluded that the development of German vocabulary learning tools (Wortschatz) based on Teams-Games-Tournament (TGT) learning model was effective in increasing the mastery of students' cosmetics.

CONCLUSION
1. The development of the German vocabulary learning device (Wortschatz) based on the Teams-Games-Tournament (TGT) learning model met very valid criteria, because all aspects of device development were well implemented.
2. The implementation of the development of German vocabulary learning tools (Wortschatz) based on Teams-Games-Tournament (TGT) learning model met practical criteria because all components of device development were well implemented.
3. The application of the development of German vocabulary learning tools (Wortschatz) based on Teams-Games-Tournament (TGT) learning model fulfilled the effective criteria, because the teacher's ability to carry out learning was very good, student activities were carried out as a whole, students' responses to learning tools developed were very positive.
4. The German vocabulary learning tool (Wortschatz) developed based on the Teams-Games-Tournament (TGT) learning model met very valid, practical, and effective criteria.

SUGGESTIONS
1. The learning device design based on the Teams-Games-Tournament (TGT) learning model should be developed for other materials and skills in order to make students more interested, happy, and active in learning German.
2. The German vocabulary learning device produced was only tested on students of class XI IPA I Makassar. This trial was the basis of consideration in revising the learning device. Therefore, to get better results it is advisable to conduct trials on a wider scale.
3. This research had resulted in the design of German vocabulary learning devices (Wortschatz) based on Teams-Games-Tournament (TGT) learning that was very valid, practical, and effective. Therefore, it is recommended that the German
subject teachers implement the learning tool in learning German.

4. Learning using the German vocabulary learning tool (Wortschatz) which was developed based on the Teams-Games-Tournament (TGT) learning model had a positive impact on improving the German vocabulary, therefore it is recommended that German language teachers use the Teams-learning model Games-Tournament (TGT).

REFERENCES