

Students' Perceptions of Crossword Puzzles Media Implementation in Accounting Learning

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Abstract— This classroom action research (CAR) aims to know students' perceptions of learning evaluation on crossword puzzles media at senior high school in accounting service company competence. The researcher used an accounting crossword puzzle media containing 10 essay questions and consists of 5 vertical columns and 5 horizontal columns. This CAR was done collaboratively with the teacher consisted of three cycles. The subjects of the research were 30 students of senior high school. The data were collected by questionnaire, observation, and documentation. The data were analyzed using description analysis data. The procedure of analysis data consisted of data reduction percentage, presenting the data, and making conclusions. The analysis descriptive data using percentage consisted of students' learning scores. The result of this research showed that 97% student agree that implementation of crossword puzzles can be used to learning evaluation. The student was delighted with the implementation of crossword puzzles because it can create an active learning.

Keywords—*crossword puzzles, media implementation, accounting learning.*

I. INTRODUCTION

Evaluation of learning is important thing in accounting teaching and learning activities. Evaluation used to improve less effective learning. With the evaluation of the teacher becomes aware of the development students in absorbing learning materials. Evaluation is not only about value but also meaning. Evaluation is a process for describing an evaluation and judging its merit and [1]. Evaluation of learning relate to three measured aspects of cognitive, affective, and psychomotoric. Teachers need an evaluation to measure students' abilities. The student's ability is the understanding of the material presented by the teacher. Evaluation able to describe ability of student in mastering subject matter of accounting. Teacher plays an important role in selecting the evaluation used. The accuracy of selection of evaluation tools can measure how far the mastery of the material by students.

Evaluation to be effectiveness if successful and appropriate in the learning process. Indicator of effectiveness is the achievement of a predetermined goal or goal is a measurement where a target has been achieved in accordance with goal which has been planned. The effectiveness of evaluation is the relationship between output and objectives, greater the contribution of output to the achievement of goals, the more effective [2]. In this study the evaluation of learning by using crossword puzzles to be effective when it

reaches a predetermined goal. Evaluation in this case measures the students students' knowledge, students' attitudes, and psychomotoric of the students in the group while doing the questions given by the teacher. Teachers give 30 minutes to work on accounting questions in the form of crossword puzzles media. In group activities students are required to express opinions, respond, and ask questions during group activities. This is in appropriate with the purpose of active learning. At the time of group activities researchers measure the affectiveness and psychomechanical aspects of students. This is in appropriate with the implementation of the 2013 curriculum on the current learning process.

The implementation of 2013 curriculum requires students to take an active role in learning process. The learning process becomes focused on the students. In learning process, students are given the opportunity to play an active role. The role of students in learning is to provide material-related responses, ask questions, or refute statements. Learning to be good when learning involves students in the learning process because the process is more important more than the outcome. Good process will produce good value too. The evaluation of 2013 curriculum not only measures the cognitive domain but also the affective and psychomotor aspect. The type of evaluation that can measure the cognitive, affective, and psychomotor domains is the type of problem combined with the games. Therefore in this study the researchers chose crossword puzzles media as an evaluation tool to measure students' knowledge, students' attitude, and students' psychomotor. Crossword puzzles is a games that can be used as an evaluation tool for accounting learning. This game is flexible and can be modified according to the related material. The accounting crossword puzzles consists of vertical and horizontal columns which filled by students. Crossword puzzles can be done individually or in groups. Group formation can be tailored to the learning objectives. By working on the problem on crossword puzzles, teachers can simultaneously observe students' attitudes and students' psychomotoric during the learning process.

The accounting material contain a matter of counting with interrelated material. Students are required to focus in the learning process. Evaluations used by teachers should also be able to measure students' cognitive, student' affective, and students' psychomotor aspects. Therefore, a test type evaluation tool that combined with an accounting crossword puzzles game is required. By using a crossword puzzles

teacher can simultaneously observe the behavior of students in groups and measure students' knowledge through the student's answer density. In this study, researchers measure the effectiveness of the implementation crossword puzzles as an evaluation learning in the students' perceptions. Students who can determine the application of learning or evaluation tool suitable to apply or not. Students as assessors of the use of crossword puzzles are effectively used or not in learning. Evaluation tool is appropriate when able to measure students' ability and students' understanding of the subjects being pursued. The effectiveness of the use of crossword puzzles in service company accounting competence is measured by comparing the data obtained at the time of research with the objective standards to be achieved.

Facts in the school show that teachers of SMA Negeri 1 Wonosari used essay test in measuring ability of student in comprehending problem. Essay test is made in two different problems. The teacher gives the essay and the student answers with the set time range. This indicates that the type of evaluation which teachers used less varied. Seeing this phenomenon, researchers apply crossword puzzles as an evaluation tool that can measure students' cognitive, students' affective, and students' psychomotor aspects at once. Researchers choose crossword puzzles because crossword puzzles are flexible and adaptable in various questions. The type of problem applied can be either words or numbers. Crossword puzzles are flexible and demands the creativity of making questions that match the material of accounting learning.

The problem used in this research is 10 problems essay by guessing on the columns of answers that have been made. The columns are presented in a horizontal and vertical shape. Crossword puzzles are fun games to measure students' abilities.

The rest of this paper is organized as follow: Section II describes the theoretical background on the effectiveness of media implementation, learning Evaluation, and learning crossword puzzles. Section III describes the proposed method. Section IV presents the obtained results as well related discussion. Finally, Section V concludes this work.

II. RUDIMENTARY

A. *The Effectiveness of Media Implementation*

Effectiveness indicates the level of achievement of a goal, an effort is said to be effective if the business reaches its goal ideally. Effectiveness can be said with definite measures such as business *X* is 60% effective in achieving goals *Y*. Effectiveness is a measure that states the extent to which the goal of quality, quantity, and time has been achieved [3]. Effectiveness is an assessment made in relation to individual, group, achievement closer to achievement expected to be more effective. Effectiveness is a state of the extent to which the benefits and achievement of objectives have been achieved. The effectiveness of teaching can be viewed from two aspects [4] namely; (1) the effectiveness of teachers' teaching, planned learning activities can be done well.

By itself this principle must consider the ability of teachers so that improvement efforts to complete each

program need to get attention (2) the effectiveness of student learning with learning objectives that are expected to be achieved through teaching and learning activities that are pursued. Improvement efforts are generally done by choosing the type of methods and tools deemed the most powerful to be used in order to achieve the desired goals. Effectiveness is everything that is done properly and correctly so that the desired goal can be achieved with predefined standards. Effectiveness is measured by achievement and compared to goal plan. A learning evaluation is said to be effective if the process has been encouraging and favored by students. The accuracy of effectiveness in the use of evaluation tools depends on the objectives of the evaluation, the learning materials, and the conditions of the students [5]. Criteria of effectiveness evaluation of learning based on student response to the use of crossword puzzles as an evaluation tool in accounting service companies [6] namely; (1) learning completeness, learning can be said to be complete if at least 75% of the students have scores = 60 (2) learning methods used when students show the difference between initial understanding and understanding after learning (3) the use of evaluation tools is said to be effective if able to increase interest and motivation and students learn in a state of fun. In understanding the effectiveness of each room gives different mean according to the point of view and the interests of each so that the effectiveness is the suitability between the students who perform the task with the objectives of the evaluation of learning [7].

B. *Learning Evaluation*

Evaluation is a systematic collection of facts to determine whether in fact there is a change in students and to determine the extent to which the degree of change in the student's personal [8]. Evaluation is a process of describing, obtaining, and presenting useful information for assessing decision alternatives. The purpose of evaluation is different from the purpose of the examination. Simply evaluate is used to improve the system by giving an assessment based on data taken from group of objects. In this research, 30 students XI *Matematika* dan *Ilmu Alam* were tested. While in the exam can be done without any purpose to improve the value. Testing also has been done just to filter and specify the classes of the object set. The main functions of evaluation in learning can be grouped into four functions, namely: (1) formative function, evaluation can provide feedback for teachers as a basis for improving teaching and learning process and held remedial program for students who have not fully understand the material learned of accounting (2) summative function, evaluation can know the level of mastery of students to the subject matter, determining the value of value as a matter of decision of class increase with the existence of student learning progress report and can increase student learning motivation (3) diagnostic function, evaluation show the background of student having difficulty learn (4) the selection and placement of evaluation functions can serve as a basis for selecting and placing students according to their interests and abilities. The objectives of the learning evaluation include: (1) to see the productivity and effectiveness of

teaching and learning activities (2) to improve and refine teachers' activities (3) to improve, refine and develop teaching, and learning programs (4) to find out what difficulties faced by students during the learning activities and find a way out (5) to put students in appropriate teaching and learning situations in appropriate with their abilities. Learning outcomes can be grouped into three domains: cognitive, affective, and psychomotor [8]. The cognitive domain consists of knowledge, understanding, application, analysis, synthesis, and evaluation. Affective domain consists of willingness to accept, willingness to respond, assess, and organization. Psychomotor domains consist of muscular or motor skills, manipulations of materials or objects, and neuromuscular coordination. Form of learning evaluation consists of 5 forms [8]. Form of evaluation of product learning, evaluation forms that assess the outcome and process. Portfolio evaluation forms an assessment through a systematic collection of work (student work) ranging from data collection through student work, ongoing collection and assessment and reflection on the development of various competencies, the level of progress of the student progress, and an integral part of the learning process for one period and achievement of diagnostic goals. Development of evaluation tools can know the assessment of both product activity and learning process how a student managed to get the learning result (product) itself [9]. Evaluation tools can complete the assessment by the teacher how important the evaluation and responsibilities of a teacher in the development of student abilities. Nowadays evaluation is no longer dominant to cognitive domain only, but also affective and psychomotor aspect, not only focus into learning result but also pay attention to the process [10]. Approach and evaluation tool itself is classified into three namely; (1) social competence that can be replicated by self-assessment, expert-assessment, or by psychogenetic tests (2) axiological competences that can be measured by rating ratings according to educational discipline, expert judgment, questionnaire, and self-assessment (3) communication and information competencies that can be measured by rating ratings according to educational discipline, expert judgment, and analysis of activity outcomes [11].

C. Crossword Puzzles

As university teachers we have the responsibility of trying to promote interest and learning and to find ways to reach students, which is not very easy, especially in large classes. Crosswords have been shown to have several adjectives that are active adjunct to the repertoire of active strategic learning [12]. Crossword puzzles honing students' thinking skills. Aspects that can be measured with this crossword puzzle are cognitive, affective, and psychomotor aspects. With a crossword puzzle game, students will experience the process of thinking. Crossword puzzles can influence the value of a student's test as a proof of a successful learning [13]. This game can be used as an evaluation tool. Problem-solving with crossword puzzles can various and be able to hone teachers' ability to make problems. Students can answer questions on the crossword by filling the columns flat or down. Teachers can create matters with a level of creativity. Use of crossword puzzles

provides a simple and creative way to incorporate learning [14]. Crossword puzzles make better results on student achievement and can explain techniques that emphasize information [15]. Crossword puzzles improve learning and lead to important topics and serve as a good tool in learning. The use of crosswords provides a simple, creative, and effective way to incorporate active learning [16]. Many professors assume students are actively engaged when they take notes and ask questions [17].

III. PROPOSED METHOD

The research method used is classroom action research (CAR) by applying crossword puzzles media to accounting subjects with adjusting journal material. Subjects in this study were as many as 30 students of class XII *Matematika* dan Ilmu Alam 1 of SMA Negeri Wonosari. Implementation have been done in three cycles. The researchers measured the student's perceptions of crossword puzzles by comparing the results in cycle I, cycle II, and cycle III. Analytical technique used is descriptive analysis. Data is processed and presented in terms of percentages, tables, and graphs. The student's perceptions in this research is the use of crossword puzzles as an evaluation tool on the accounting material of service companies.

IV. RESULT AND DISCUSSION

Crossword puzzles media (see Figure 1) in accounting learning are made based on the accounting material of service company's competence. The problem consists of 10 questions with 5 horizontal columns and 5 downhill columns. The questions consist of 5 questions of words and 5 questions of numbers. Students are required to work on a number problem by calculating in accordance with the concept of accounting. Students are given the opportunity to answer questions in groups. So, at the time of the group of researchers can observe the cognitive, affective, and psychomotor aspects of students.

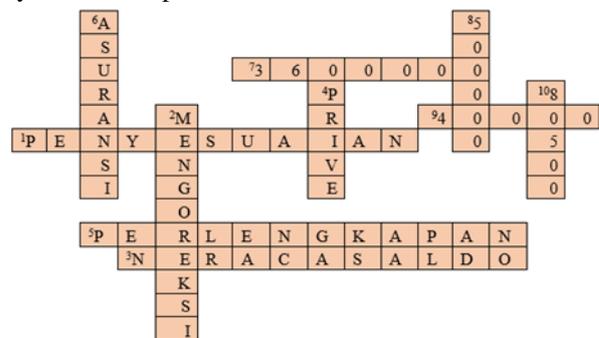


Fig 1. Accounting Crossword Puzzles References

TABLE I. STUDENTS' PERCEPTION OF THE IMPLEMENTATION OF CROSSWORD PUZZLES IN ACCOUNTING LEARNING

Indicator	Percentage
1. Students are eager to follow the learning with crossword puzzles media implementation	87.50%
2. Students understand the accounting material described by crossword puzzles media in learning	80.83%
3. Students are interested in accounting material	85.00%

explanations with crossword puzzles media in learning	
4. Students more easily understand the accounting material in the presence of assignments done in groups	81.67%
5. Students get information related to accounting material while doing group work	80.83%
6. Students are eager to do exercise problem on crossword puzzles media	89.17%
7. Students try to answer the problem modified by crossword puzzles media	91.67%
8. Students work together in groups to solve the problem in the form of crossword puzzles media	88.33%
9. Students enjoy working in groups using crossword puzzles media	85.00%
10. Students are eager to ask a group in understanding the accounting material	80.00%
11. Students can exchange opinions with friends while working on assignments with crossword puzzles media	85.00%
12. Students try to explain the accounting material in learning by using crossword puzzles media	85.00%

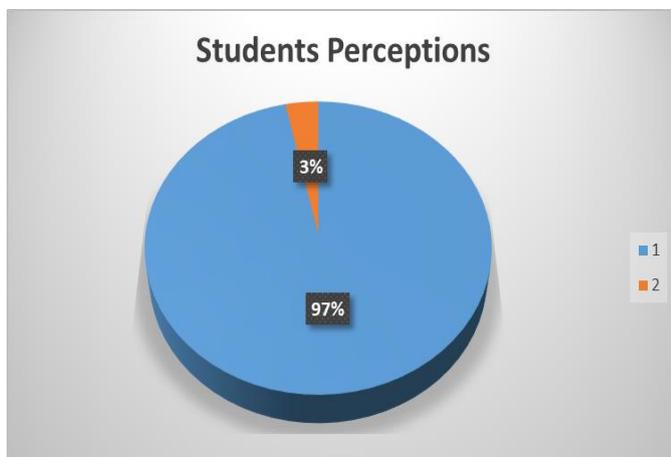


Fig 2. Students' Perceptions

Based on Table I and Figure 2, it shows that as many as 97% of students of grade XII *Matematika dan Ilmu Alam* of SMA Negeri 1 Wonosari agree and satisfied with the implementation of crossword puzzles media as a tool of evaluation on the journal material adjustment accounting services company. This shows that the use of crossword puzzles as a means of evaluation is favored by students and students not feel bored during the learning process takes place. Students eagerly follow the accounting learning. Students are easy in understanding the accounting material. The implementation of crossword puzzles media can create active learning.

V. CONCLUSION

Crossword puzzles can be implementation to accounting learning service company competence. Students are eager to follow the learning with crossword puzzles media implementation amount 87,50%. Students understand the accounting material described by crossword puzzles media in learning 80.83%. Students are interested in accounting material explanations with crossword puzzles media in

learning 85.00%. Students more easily understand the accounting material in the presence of assignments done in groups 81.67%. Students get information related to accounting material while doing group work 80.83%. Students are eager to do exercise problem on crossword puzzles media 89,17%. Students try to answer the problem modified by crossword puzzles media 91.67%.

Students work together in groups to solve the problem in the form of crossword puzzles media 88,33%. Students enjoy working in groups using crossword puzzles media 85,50%. Students are eager to ask a group in understanding the accounting material 80.00%. Students can exchange opinions with friends while working on assignments with crossword puzzles media 85.00%. Students try to explain the accounting material in learning by using crossword puzzles media 85.00%. Suggestions (1) schools should improve the learning process by motivating teachers to implement varying learning evaluations (2) teachers are expected to develop appropriate and appropriate instructional evaluations with student skills and encourage students to take an active role in learning (3) in both teaching questions to teachers or friends during the process of group activities (4) similar researchers are expected to develop a more in-depth classroom action research on other competencies, so as to contribute insights in the field of education.

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