Effective Thinking: Representation Implementation
Word Square Learning Model on Islamic Religious Education

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Abstract: The philosophy of the learning process carries out at least five main dimensions, namely active, innovative, creative, effective and fun. The content of Islamic religious education learning materials such as the Koran, hadith, morality and others, requires a plurality of learning models. One of the learning models that can be used in learning Islamic religious education is the word square. This study aims to examine more deeply the benefits of word squares in improving and developing the ability to think effectively as an indicator of the learning model. The research instrument used written interviews, with a questionnaire model with five component indicators of the ability to think effectively. The number of respondents was 35 students of class X at SMAN Darussholah Singojuruh Banyuwangi. The average research results for measuring the five component indicators of the ability to think effectively reach 93.7 per cent which confirms that the word square learning model played a role in improving and developing students' effective thinking.

Keywords: effective thinking; model; learning; word square

Introduction
The philosophy of the learning process carries out at least five main dimensions, namely active, innovative, creative, effective and fun. This terminology is popularly known as PAIKEM, which emphasizes the implementation of learning that can

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encourage the achievement of learning outcomes as the main objective of the activity (Indrayati, 2019; Priyono, 2018; Yatimah et al., 2019). This reality cannot be separated that learning success is not only marked by cognitive dimensions but also by affective and psychomotor domains (Purwanto, 2019).

Implementation of education and learning with the orientation of developing these three domains does require a process that is not simple but requires comprehensive thoughts and considerations, starting from school infrastructure (Sugiarto, S., Neviyarni, S., & Firman, 2021), availability of learning media (Isnaeni & Hildayah, 2020; Junaidi, 2019), teacher competency (Nidawati, 2020), student characteristics (Janawi, 2019; Mansyur, 2020), models, methods and appropriate learning strategies (Afandi et al., 2013; Sudrajat, 2008). All of these components needed in the realm of teaching and learning activities cannot be separated by a new paradigm shift in the learning process from teacher-centred or teacher-centred to student-centred learning that is contextual (Berata, 2022; Morel, 2021).

This realm of need is not only driven by the migration from "teacher-centered" to "student-centered", but is also supported by learning success which is not only marked by passive cognitive factors but in a more active cognitive context known as Higher Order based learning. Thinking Skills (HOTS) (Anderson et al., 2001; Gunawan, 2014; Syahputra & Nasution, 2018; Wilson, 2001). The projection of the desire for HOTS-based learning is the development of creative and critical ways of thinking so that it has a positive impact on the character and attitude of students as a representation of the success of the education and teaching process following the definition contained in article 1 paragraph 1 of the 2003 National Education System Law (Setiawan & Jatmikowati, 2020).

Citing the description above, the whole process must be carried out by carrying out an active, creative, effective and fun process philosophy, in the context of teaching and learning activities, requiring the right learning model. Islamic religious education subjects that are more inclined to the aspects of doctrine and dogma, put forward proportionally the dimensions of the world and the hereafter. The contents of learning materials are also more in the context of learning the Qur’an, hadith, morality and others (Ishak, 2021; Zubaidillah & Nuruddaroini, 2019), requiring a plurality of learning models used in building an effective teaching and learning process of Islamic religious education. Efficient. Aligning the content of learning materials with the models used is a necessity that cannot be ruled out.

Holistic and integrative are the main features of how the learning of Islamic religious education in the 21st century must be carried out (Rahmat, 2021). The process of teaching and learning activities in Islamic religious education is not only doctrinal and dogmatic but must be able to strengthen human identity according to its nature (Mizani & Mahani, 2023; Zainuri et al., 2016). Several learning models that can be used include mind mapping, Numbered Heads Together (NHT) which is suitable for memorizing the Koran, picture by picture can be used for prayer discussion material, and several other models such as word square, Student Team Achievement Division (STAD, Two Stay Two Stray for learning Islamic religious education (Hadziq, 2017).

Some of the descriptions of the various learning models above, one of which is interesting to study in more depth related to word squares. The interesting side of this learning model is the lack of use in Islamic religious education. On the other hand, the word square learning model, besides placing more emphasis on student-centred learning, encourages students to have foresight and accuracy in answering questions which has an impact on the development of an effective
mindset. The word square model, which is included in the cooperative learning type, is a reinforcement of the lecture learning method (Rinjani et al., 2021). This reality is certainly very much in line with Islamic religious education learning materials which have doctrinal and dogmatic dimensions.

Further assertion, related to the advantages of word square, as a learning model, can be described as follows: 1. Understand the material; 2. Train for discipline; 3. Practising conscientious and critical attitude; and 4. Stimulating students to think effectively (Riadi, 2022). The development of an effective mindset, which is one of the core strengths of the word square model, is a very interesting aspect to study. Theoretically, mindset or mindset has two categories, namely growth and fixed mindset (Kapasi & Pei, 2022). Based on the previous description, related to the growth mindset, one of which is influenced by teaching practices (Yu et al., 2022), it becomes the basic argument that the use of word squares as a learning model for Islamic religious education is very appropriate for developing students' effective thinking.

Effective thinking is two words that form a term that has a very comprehensive meaning. Effective thinking is about quality, productivity, or success of thought which is marked by maximum results following the goals and objectives to be realized (Sukhanova, 2020; Tulyakov & Lebid, 2021). In short, effective thinking is the speed and accuracy of the thinking process so that it can achieve the desired goals. In short, the ability to effectively think is a student's ability in success to answer questions as an indicator of the success of teaching and learning activities. There are indicators of effective thinking that can be linked to the implementation of the word square learning model, as illustrated as follows.

**Figure 1. Concept Map of Effective Thinking in the Word Square Learning Model**

| 1. Ability to do the right |  
| 2. Ability to choose the correct answer |  
| 3. Ability to develop mindset |  
| 4. Accuracy in working questions |  
| 5. Ability to concentrate on answering question |  

Referring to the picture above, the meaning of the description of effective thinking, with five criteria in implementing the word square learning model, is the student's ability to answer, choose, concentrate, and build thought patterns correctly and precisely. This is related to the application of the word square which uses a puzzle model in evaluating and measuring the level of effectiveness and efficiency of learning process achievements. The dimensions of critical and creative thinking are not the main focus of implementing the word square learning model, but rather the ability to think effectively, namely the success of students in answering learning evaluations in the form of crossword puzzles correctly and quickly.

Several studies using word squares as a learning model used in Islamic religious education are still limited. One of the articles that discusses word squares highlights the use of this learning model to increase motivation, activity and learning achievement (Munthe, 2020). Another article that makes word squares the object of research, elaborates more on the realm of conceptual study of this model in improving student learning outcomes (Rinjani et al., 2021). The results of the research also highlight word square in Islamic religious education, with the title "Effectiveness of the
Word Square Learning Model on Student Learning Outcomes in PAI and Moral Subjects Class IX at SMP Negeri 7 Depok. This research generally examines aspects of student learning outcomes in general (Silmi et al., 2018).

As for the word square as one of the learning models used at SMAN Darussolah Singojuruh in Islamic religious education, the object of this research is more directed at looking at the development of students’ effective thinking skills. This reality cannot be separated from the fact that the educational process is not only related to learning outcomes numerically but also related to the pattern of students’ thinking development. Referring to this context, this study aims to look at students’ ability to think effectively at SMAN Darussolah Singojuruh Banyuwangi in the subject of Islamic religious education.

\textbf{Effective Thinking in Word Square Learning Model}

Effective thinking is two terms combined into one which describes a process of understanding and solving problems. The process of teaching and learning activities is a means that can realize students' abilities to think effectively. The meaning of thinking for yourself in Plato’s terminology is an ideational activity, not a motoric one, using the abstraction of "ideas" (Maulidya, 2018). Thinking comes from the basic word thought which means reason, memory, is the process of using reason to consider and decide (Kuswana, 2011). As for the word effective, it has the meaning of doing the right things (Saefullah & Sule, 2010).

Based on the definition above, effective thinking can be defined as a process of using reason or ideas to do the right job. Concretely, in the terminology of the learning activity process, students can understand and comprehend the learning material presented by the teacher, which has an impact on the student's ability to complete the evaluation or assessment process with the standard learning outcomes determined by the teacher. This cannot be separated from the various problems of the learning process, which requires students to be able to think effectively so that the results of teaching and learning activities can be achieved with excellent results.

Referring to the description above, the word square learning model, which is part of the cooperative learning method, is very identical to the puzzle form as a basis for evaluation used to measure the effectiveness and efficiency of the teaching and learning process. Even though the word square learning model has shortcomings, several advantages include encouraging students to understand the material, training discipline, practising careful and critical attitudes, and stimulating students to think effectively (Silmi et al., 2018). Based on the description above, the main function of implementing word square learning is to improve students' effective thinking abilities in the process of teaching and learning activities.

Concerning indicators of effective thinking in word square learning, as described in the research background, they include the ability to do the right, to choose the correct answer, to develop a mindset, to concentrate on answering questions, and. accuracy in working questions. Based on these aspects, it is very clear that the use of the word square learning model is to improve effective thinking skills as indicated by students being able to answer questions or questions given by the teacher correctly and precisely, and under the availability of time to improve student discipline.

\textbf{Research Methods}
The form of this research is descriptive research, which takes place at SMAN Darussholah Singojuruh Banyuwangi. Research respondents were class X with a total of 35 students. The instruments used were observation and written open interviews in the form of a questionnaire with options for answer choices that had been provided with a grade of 1 to 5. The number of questions given to respondents was five statement items. As for the analysis of research data using percentage techniques. The percentage descriptive analysis criteria refer to the following table.

Table 1. Percentage Descriptive Analysis Criteria

<table>
<thead>
<tr>
<th>No</th>
<th>Percentage</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20 % – 33%</td>
<td>very ineffective</td>
</tr>
<tr>
<td>2</td>
<td>34% – 53%</td>
<td>ineffective</td>
</tr>
<tr>
<td>3</td>
<td>54% – 73%</td>
<td>fairly effective</td>
</tr>
<tr>
<td>4</td>
<td>74% – 85%</td>
<td>effective</td>
</tr>
<tr>
<td>5</td>
<td>86% – 100%</td>
<td>very effective</td>
</tr>
</tbody>
</table>

Results and Discussion

Based on the results of observation and data collection with 5 dimensions which are used as indicators in measuring students' ability to think effectively related to the learning model used by the teacher, it can be described as follows:

Ability to do it right

This statement is intended to measure the level of accuracy of students in working on questions given by the teacher. Based on the results of research data collection on 35 students, can be described in the diagram below:

Figure 2. Diagram of the Percentage of Students' Ability to Do Correctly

Based on the diagram above, it can be explained that the student's answers were, were they able to carry out the learning evaluation correctly, 20 percent answered by choosing option value 5 whose meaning explained that 7 students could answer correctly. The grade value of 4, answered as many as 27 students or 77 percent. The remaining 35 students, as many as 1 students or 3 percent, answered with a grade of 3, which means they still have doubts about the
accuracy of working on learning evaluation questions.

*Ability to choose the correct answer*

The implementation of the learning model is always aligned with the form of evaluation given by the teacher to students.

Based on the data obtained, the student's ability to choose the correct answer related to the implementation of the word square learning model, used by Islamic religious education teachers can be described in the following diagram:

Figure 3. Diagram of the Percentage of Students’ Ability to Answer Questions Correctly

The picture above explains that 31 percent or 11 students gave opinions that were very confident in being able to answer correctly about the learning evaluation questions given by the teacher. As many as 20 students or 57 percent, gave answers that were confident of being able to answer the evaluation questions correctly. Meanwhile, 4 students or 11 percent were still not sure that they were able to answer correctly the evaluation of the learning done.

*Ability to develop mindset*

The development of mindset is one of the indicators that is the main goal of implementing the learning process. Research data, based on the results of student answer choices on the questionnaire sheet given as a form of structured interviews, the following answers are obtained: 1. The answers of students who choose a grade value of 5, which means they have a strong belief that their mindset is developing, with the use of the word square model, as many as 10 students or 29 percent; 2. The students’ answers were 21 people or 60 percent inclined to the answer choices of grade 4, meaning that students believed that the development of their mindset had also increased; 3. As for students who felt unsure, only 4 students or 11 percent. An overview of the percentage level can be displayed as follows:
Figure 4. Diagram of the Percentage of Students Able to Develop a Mindset

40% 29% 11% 60%

Accuracy in working on questions

Referring to the picture and description above, it can be seen that the percentage that has great value lies in the students’ belief or agreement that their mindset develops along with the teacher’s use of the word square model in the realm of learning Islamic religious education.

Figure 5. Diagram of Student Accuracy Percentage in Answering Questions

57% 40% 3%

The circle diagram above explains explicitly, that students who are very thorough in working on learning evaluation questions reach 40 percent or 14 people. While the level of accuracy is good as many as 20 students or 57 percent. As for the level of accuracy, only 1 student or 3 percent is lacking. This indicates that the majority, or 97 percent with a total of 34 students, confirms that they have a good level of accuracy in
working on evaluation questions for learning Islamic religious education.

**Ability to concentrate on answering questions**

The ability to concentrate is the fifth indicator in seeing students' effective thinking skills as a result of utilizing the word square learning model in teaching and learning activities of Islamic religious education at SMAN Darussolah Singojuruh Banyuwangi. Referring to the results of research data, it can be described that the level of student's ability to concentrate can be categorized as a good average. This is based on the results of data recapitulation, that students who stated that they were able to concentrate very well reached 28 percent or 10 students.

While students who said they could concentrate when working on questions in the good category were 24 students or 69 percent, while the remaining only 1 student with a percentage of 3 percent stated that their ability to concentrate in working on questions was still not good. This description is illustrated in the following diagram:

Figure 6. Diagram of the Percentage of Students' Concentrate on Answering Question

The description in the description and picture above explicitly explains that the use and utilization of the word square learning model used by the teacher can encourage students to concentrate on working on problems. The percentage level in the good and very good categories, which reached 97 percent or 34 students, indicates that the success rate of applying the learning model used in teaching and learning activities in Islamic religious education has very good benefits.

Effective thinking, which is an indicator of the benefits of using the word square learning model, as a whole, the results of the research data from the first to fifth components can be described in a bar chart as follows:
Based on the visualization of the diagram above, it is clear that the highest percentage in constructing effective thinking is the component of being able to answer correctly and accurately in working on questions with a percentage of 97.1 percent. The difference between the two lies in the role of grade 5 scores in accuracy in working on questions that are greater by 40 percent, whereas the component being able to answer is only 20 percent. The value has a smaller role, namely the component that can answer correctly and can develop its mindset with a percentage of 88.5 and 88.6 percent respectively. Overall of the 5 components, the average score in grade 5 reached 29.7 percent, in grade 4 it was 64 percent, while in grade 3 it was only 6.29 percent. The simple meaning is that the use of the word square learning model plays a role in constructing the effective thinking of the students of SMAN Darussholah Singojuruh Banyuwangi.

The results mentioned above explicitly clarify the role of the word square learning model in developing students’ effective thinking. This reality is in line with the objectives of the word square learning model, one of which is related to effective thinking (Riadi, 2022). The use of forms such as crossword puzzles that exist in the concept of the word square learning model, basically as an effort to develop students’ effective thinking skills. Referring to the writings of Burger and Starbid (2012) about “The Five Elements of Effective Thinking” which was later used as a reference by Zentner (2016) with the title “Effective Thinking Strategy: Five Elements to Facilitate Ideation”, it can be realized that the word square learning model is more on elements of the earth that are meaningful to build effective thinking must be done by building interest and understanding the topic of learning material so that students’ self-confidence increases (Zentner, 2016).

The benefits of the word square learning model in developing effective thinking cannot be separated from the philosophy of a learning paradigm based on student-centred learning. Active students are the main indicator that the learning process can run effectively and efficiently. The
accuracy of model selection is the main key to presenting the achievement of learning objectives achieved (Fakhrurrazi, 2018). The form of crossword puzzles in the word square model, which is used in evaluating the level of knowledge and understanding of students, can concretely encourage students to be active in teaching and learning activities. Student activity is not only in the cognitive domain but in the context of thinking effectively and finding solutions efficiently in finding answers (Murni, 2021).

The existence of deceptive letters in crossword puzzles in the word square learning media is not an attempt to make it difficult for students but as a distractor for answers. This is of course intended so that students can improve accuracy and foresight in answering evaluation questions given by the teacher. These stages are carried out after the teacher provides knowledge input to students as a process of validating or measuring the level of understanding possessed by students. This context is in line with the concept of the teaching-learning process, which is related to instrumental inputs such as equipment, facilities, materials and teachers (Purwanto, 2019). In line with the word square learning model, the instrumental input in the form of a question sheet similar to a crossword puzzle can explicitly encourage student learning outcomes (Nurfauziyah & Mahmud, 2018). The use of the word square learning model does not only encourage the achievement of learning outcomes but universally, namely being able to develop students' effective thinking.

Conclusion

Based on the measurement of the five components of effective thinking indicators which are used as instruments for research questions, the ability to answer correctly has 97.1 percent; the component of the ability to answer correctly is 88.5 percent; the ability component in developing mindset is 88.6 percent; accuracy in answering questions of 97.1 percent; and the ability to concentrate in answering questions reached 97.2 percent. The average level of student answers to the five components that became research questions reached 93.7 percent. Referring to the above analysis, it can be concluded that the word square learning model plays a role in improving and developing students' effective thinking skills.

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