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# Crossword puzzle as a learning media during the covid-19 pandemic: HOTS, MOTS or LOTS?

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Abstract. Crossword Puzzle is a learning medium that is easy to use by everyone. Moreover, the era of the Covid-19 pandemic, which created its own challenges for the learning process of Arabic in schools as a driver for foreign language communication for students. Even in the era of the Covid-19 pandemic, learning must remain oriented to the life skills of the 21st century which are famously known as HOTS (Higher Order Thinking Skills). The learning media used must also lead to students' HOTS skills. On this basis, this study wants to analyze the use of Crossword Puzzle media in learning maharah qira'ah during the Covid-19 pandemic era at SMA Islam Sabilillah Malang Boarding School and classify it in the LOTS, MOTS or HOTS categories. This research uses a qualitative approach with a case study method. Data collection techniques include observation, interviews and documentation with data analysis techniques using Miles & Huberman's theory, namely reducing, presenting and concluding field data. The results showed that the use of Crossword Puzzle media in learning maharah qira'ah has met HOTS standards with an indication that learning is student-centered, the use of Crossword Puzzles requires student creation and innovation and improves critical and deep thinking skills when doing Crossword Puzzle that matches the qira'ah text being taught. This study recommends other researchers to test the effectiveness of learning Arabic at SMA Islam Sabilillah Malang Boarding School.

#### 1. Introduction

The government has implemented the improvement of Arabic language in Indonesia. It is supported by a change in the Islamic and Arabic Language Education curriculum in the academic year 2020/2021 that is contained in the Decree of the Minister of Religion (KMA) number 183 of 2019 [1]. In this 2019 curriculum [2], [3], student critical thinking skill becomes the main thing that must be developed by teachers. at school [4]. Critical thinking is one of the indicators of learning patterns in the 21st century that is usually called HOTS (Higher Order Thinking Skills) [5].

HOTS is a high-level thinking skill indicated by critical, analytical, logical, creative, and metacognitive thinking [6]. Saleh, (2019) reveals in the 21<sup>st</sup> century the learning process must contain collaboration, communication, cooperation and creativity. The opposite of HOTS is the lowest level of MOTS (Middle Order Thinking Skills) and LOTS (Longer Order Thinking Skills) [8].

HOT skills require students to think abilities at a metacognitive level, students do not only remember, understand, and describe subject matter but also they develop material in real life [9].

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**1933** (2021) 012126 doi:10.1088/1742-6596/1933/1/012126

HOTS-based learning makes students critical of a problem in their environment and can carry out analysis, and create solutions to all problems encountered[10]. In principle, the strategies and learning tools developed by teachers in schools must in line with the criteria. Even though there have been many studies on HOTS, the implementation in the classroom has not been optimal, especially in relation to the achievement of student competencies expected in the curriculum[11]. In terms of teaching and education, thinking is an important factor for meaningful learning[12].

Arabic learning is a foreign language subject in Indonesia, taught in formal and informal schools ranging from Madrasah Ibtidaiyyah (MI) to tertiary institutions[13]. Many students state that Arabic language is difficult to learn, it is even seen as an unwelcome field of study[14]. Likewise, in terms of implementing learning, there are many obstacles faced by students and teachers[15]. To overcome this, the use of relevant media must be done in learning Arabic[16]. The current Covid-19 era requires learning activities to be carried out online by utilizing technology as a media for distance learning [17]. To improve student understanding of learning, Muid and Muttaqin, Muid and Muttaqin recommend Crossword Puzzle media. Besides being fun, Crossword Puzzle is also able to improve the literacy skills of the users, because it is done through the process of reading questions deeply[11].

Study from Aribowo, explains the steps for making Crossword Puzzle as an Arabic learning medium independently[20]. Rusmawan reveal that Crossword Puzzle is relevant media used in learning to write vocabulary[21]. Furthermore, Amalia and Hidayat state that Crossword Puzzle is able to improve reading and writing skills of student[23]. There is an effect of using Crossword Puzzle on improving students' reading skills[24]. Based on the analysis of previous research, it is only to configure the *maharah qira'ah* learning process and the use of Crossword Puzzles as learning media. It has not entered into the classification analysis of the use of the learning media used; whether it is oriented towards the realm of improving students HOTS thinking power or not.

The learning process of *maharah qira'ah* needs to be studied deeply whether it is included in the Higher Order Thinking Skills (HOTS), Middle Order Thinking Skills (MOTS) or Lower Order Thinking Skills (LOTS) category. By mapping the *maharah qira'ah* learning process starting at the elementary, junior high and high school levels, it is expected that it will make students easier to take part in learning *maharah qira'ah* at the university level with more complex material demands.

This research was conducted to: a) explore *maharah qira'ah* learning activities using Crossword Puzzle media at SMA Islam Sabilillah Malang Boarding School and; b) classify the Crossword Puzzle media into HOTS, MOTS or LOTS categories in *maharah qira'ah* learning. This research is expected to: a) analyze the process of learning *maharah qira'ah* in the midst of the Covid-19 pandemic using the Crossword Puzzle media which was conducted at SMA Islam Sabilillah Malang Boarding School and; b) classify the use of Crossword Puzzle media into HOTS, MOTS or LOTS categories in *maharah qira'ah* learning.

#### 2. Methodology

This research was conducted to adopt the qualitative approach to understand the use of Crossword Puzzle media in learning *maharah qira'ah* during the Covid-19 pandemic in 12<sup>th</sup> grade of SMA Islam Sabilillah Malang Boarding School. The research method used was the case study method. As stated by [25] that the case study method was carried out to obtain the data needed in detailed field research.

Furthermore, data collection techniques were carried out by observation, interviews and documentation. Researchers made in-depth observations about maharah qira'ah learning activities to find maharah qira'ah learning patterns using Crossword Puzzle media during the Covid-19 pandemic. Interviews were conducted with Arabic teachers to find out the detail steps for using the Crossword Puzzle media in learning maharah qira'ah. Meanwhile, documentation studies to obtain the data in the form of textbooks used, instructional instructions, designed exam questions and resources when teaching maharah qira'ah during the Covid-19 pandemic.

Furthermore, the data obtained from the informants were analyzed using Miles and Hubermantheory, namely reducing presenting and verifying data. Through data collection and data analysis techniques, researchers confirmed to the informants that classification of the use of Crossword Puzzle media in learning maharah qira'ah during the Covid-19 pandemic into the HOTS,

**1933** (2021) 012126 doi:10.1088/1742-6596/1933/1/012126

MOTS or LOTS categories. The data validity of this study was measured using data triangulation techniques and data source.

#### 3. Result and Discussion

Arabic Learning at SMA Islam Sabilillah Malang Boarding School (SMAIS) is included in the school curriculum. The curriculum used is the 2013 curriculum and the Sabilillah Islamic Education Institute (LPI) curriculum. The two curricula are integrated in a balanced manner through activities designed by the teacher for each subject. Arabic learning particullarly is carried out at ma'had and schools during formal school hours. Arabic material in ma'had is more emphasized on students' speaking skills coupled with studies of the yellow book carried out after maghrib prayer at the mosque with musyrif (teachers in the dormitory). Meanwhile, the Arabic subject matter taught in schools is taken from the book "Takallum Bil 'Arabiyyah" which was compiled directly by LPI Sabilillah, covering four language skills (Istima', kalam, qira'ah and kitabah). After the Covid-19 outbreak since March 2020,SMA Islam Sabilillah Malang Boarding School has been transferred to online learning by adopting E-Learning media developed by LPI Sabilillah Malang.

#### 3.1. Steps for Creating Crossword Puzzle

There are lots of online pages that can be used to make Crossword Puzzles freely including; www.crosswordlabs.com, www.worksheets.theteacherscorner.net, www.puzzle-maker.com, www.education.com, www.puzzlemaker.discoveryeducation.com, www.eclipsecrossword.com, www.crosswordhobbyist.com, www. crossword-compiler.com, www.printablecrosswordmaker.com, www.armoredpenguin.com, etc. Based on the researcher observations, the Arabic teacher at SMA Islam Sabilillah Malang instructed their students to use the puzzlemaker.discoveryeducation.com page because it is simple and easy to use.



**Figure 1.** Crossword Puzzle main page Source: puzzlemaker.discoveryeducation.com page

Figure 1. above is the main interface that must be filled before creating a Crossword Puzzle. Step 1: write the title as you wish. Step 2: determine the required width and height of the Crossword Puzzle box, the width and height are adjusted according to the number of questions prepared. The more questions, the greater the width and height. Step 3: determine the square size of the Crossword Puzzle box, but the manager has set a box size of 30 as the standard size. But it can still be changed as you wish. Step 4 fill in the questions and answers. The question is typed manually with the condition that the first word becomes "answer" in the Crossword Puzzle, then the space is to type "question". Then press "enter" to add the next question.

**1933** (2021) 012126 doi:10.1088/1742-6596/1933/1/012126



**Figure 2.** Question and Answer Column Source: Laman puzzlemaker.discoveryeducation.com

When adding the items to the Crossword Puzzle, it should be noted that the questions written must be in Latin. Crossword Puzzle does not yet support writing Arabic characters. If the answer to be added is in the form of two or more words, then write it in series without spaces, for example; "My school" is written as "my school", "my father" is written as "my father". Because if we put a space, the word after the space will be the answer in the Crossword Puzzle box. After the questions and answers have been completed, the next step is to click "Create My Puzzle", a Crossword Puzzle box will appear that is ready to run.



**Figure 3.** The Ready-Used Crossword Puzzle box Source: puzzlemaker.discoveryeducation.com page

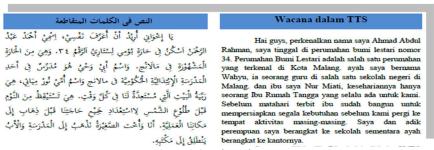
After the Crossword Puzzle box is complete, we can immediately use it. If we want to run it offline, we must first move it to Microsoft Word Office by block the title of Crossword Puzzle to the questions and answers, after that select copy and then paste it into Microsoft Word Office.

## 3.2. Teacher Ability in Using K Crossword Puzzle

Making Crossword Puzzles as a learning media means that it can be indicator of supporting student learning success. The use of media in the learning process is important to be carefully prepared in order to achieve more meaningful learning for students [26]. Murayama et al tates that the use of media in the learning process can arouse curiosity and interest[27], generate motivation and stimulation in the teaching-learning process, and can influence student psychology[28]. The use of media in learning is usefull; a) clarify the presentation of messages and information; b) increase and direct attention; c) can overcome the limitations of the senses, space and time; d) provide similar experiences to students about events in their environment [29]. So that teacher creativity is highly demanded when using Crossword Puzzle media in the learning process[30]. Teacher may not force students to be able to apply the Crossword Puzzle in learning maharah qira'ah if the teacher is still "clueless" with the media usedn [31].

**1933** (2021) 012126 doi:10.1088/1742-6596/1933/1/012126

The following are the steps taken in using the Crossword Puzzle in learning maharah qira'ah, namely: (a) The teacher introduces students how to play the Crossword Puzzle. In essence, the Crossword Puzzle media used must support the learning process of maharah qira'ah. (b) The teacher conveys the objectives of learning maharah qira'ah by using a crossword puzzle. (c) The teacher distributes qira'ah texts to students consisting of Arabic and Indonesian texts. Students are required to be more serious in reading the text because the questions to be presented in the Crossword Puzzle come from the *qira'ah* text.



**Figure 4.** Qira'ah Text Source: Guru bahasa Arab SMAIS

Teacher explains how to fill the Crossword Puzzle boxes with conditions; if the question is in Arabic, then the answer is in Indonesian and vice versa. However, there is also a question of completing the word, thus students have to read the *qira'ah* text many times so that the mufradat contained in the text becomes familiar in the students' memory. For students who do not read qira'ah texts, they certainly will not be able to answer the Crossword Puzzle questions perfectly.



**Figure 5.** Crossword Puzzle Question Source: Arabic Language Teacher of SMAIS

After explaining the terms of using the Crossword Puzzle, the teacher invites students to start working on the Crossword Puzzle by paying attention to the time set by the teacher. (f) The teacher emphasizes students to work independently, filling the Crossword Puzzle boxes with their own creativity. (g) The teacher accompanies the student while working on the Crossword Puzzle in anticipation of any questions that arise from the student regarding the Crossword Puzzle work. (h) When the student has finished working on the Crossword Puzzle, one student corrects each other's answers. Then the teacher corrects the students' wrong answers (i) After all the Crossword Puzzle work processes are completed, the teacher provides the opportunity for students to explain the contents of the discourse text given to see the level of student understanding of the discourse text being taught. (j) The teacher gives prizes to students who complete the Crossword Puzzle properly and correctly and are able to explain the essence of the discourse text.

**1933** (2021) 012126 doi:10.1

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**Figure 6.** Crossword Puzzle Answer Source: Guru bahasa Arab SMAIS

The form of learning maharah qira'ah that is carried out by the teacher is the application of Crossword Puzzle media, reading the qira'ah text carefully repeatedly, assessing peer projects and explaining the essence of the qira'ah text that is being studied is in line with the maharah learning steps. qira'ah and in accordance with the learning material carried out. Ritonga et al., (2020) state that students' understanding of the qira'ah text was the main goal of learning maharah qira'ah.

Through some of the maharah qira'ah learning activities above, the teacher has implemented the student center learning model according to the mandate of the 2013 curriculum. The teacher only acts as a learning mediator and facilitator, while students become evaluators and carry out learning independently from the instructions given by the teacher. In this learning process, the teacher can also assess students from the three recommended aspects of the 2013 curriculum called authentic assessment, in the form of a balanced cognitive, affective and psychomotor assessment. Through students movements in learning, working on the Crossword Puzzle, explaining the contents of the *qira'ah* text and responding to the activities given by the teacher, at that time the students are observed to be assessed.

After the assessment is carried out, the teacher provides reinforcement suc as material that still has errors holistically while students are asked to pay attention to the project sheet worked. It is intended that students know the things that underlie the mistakes when filling in the Crossword Puzzle box and the students immediately make corrections to the wrong answers. Furthermore, teacher also explains the essence of the qira'ah text by collaborating with student daily lives.

Students respond well to the learning process of maharah qira'ah using the Crossword Puzzle. It can be seen from the process of completing the project given, plus their enthusiasm when receiving instructions from the teacher to explain the contents of the qira'ah text in front of their friends. The researcher also received the same expression from the Arabic teacher who stated that students were very enthusiastic about learning Arabic, because learning Arabic using offline and online media was only obtained during formal learning. Another reason was that learning Arabic using Crossword Puzzle was the first time used.

Therefore, the use of Crossword Puzzle in learning maharah qira'ah increases the creativity and independence of students, forcing students to think critically and deeply in order to find the right answers in filling the empty boxes contained in the Crossword Puzzle [19]. The use of Crossword Puzzle as learning media for *maharah qira'ah* is a sign that learning Arabic is not a rigid, monotonous activity and can only rely on textbooks[33]. But learning Arabic is very fun and practical because the teaching can be done with simple media and easy to get and it is fun to run the media[1], [34].

Through the implementation of maharah qira'ah learning that has been described, it is known that the learning process of maharah qira'ah using the Crossword Puzzle media at SMA Islam Sabilillah Malang Boarding School requires students to learn independently and be able to be creative with themes that have been determined by the teacher. By this, students have a great opportunity to explore creativity and innovation in learning Arabic. Students can create Crossword Puzzle material independently and explore Crossword Puzzle sites that are widely spread on the internet.

By increasing student creativity, the use of Crossword Puzzle in learning maharah qira'ah at SMA

**1933** (2021) 012126 doi:10.1088/1742-6596/1933/1/012126

Islam Sabilillah Malang Boarding School can be categorized as HOTS-based learning (Higher Order Thinking Skills) with an indicator that it can improve critical and deep thinking of students. Moreover, students are also required to be able to make Crossword Puzzle boxes independently, evaluate their friend projects, create and innovate the qira'ah text being taught.

#### 4. Conclusion

The thinking process of SMA Islam Sabilillah Malang Boarding School through maharah qira'ah learning using Crossword Puzzle is included in the HOTS (Higher Order Thinking Skills)- based learning category. It can be proven through the creativity of teacher in designing student-oriented learning (student center). Furthermore, the learning process also requires students to think critically and deeply when working on the Crossword Puzzle. In essence, HOTS is implemented not only in the evaluation processbut also in all learning activities to make them be able to solve the problem in their life. In this case, the government has issued the right policies to meet the 21st century lifestyle. Teachers and educational institutions must implement this policy to make HOTS-based Arabic learning is not only a discoursebut also realized evenly in Indonesia.

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