THE EFFECTS OF THE CONTEXTUAL TEACHING AND LEARNING MODEL ON STUDENTS' CREATIVE THINKING ABILITY BASED ON GENDER

Depi Kurniati
Politeknik Negeri Sriwijaya Palembang
depi.kurniati@polsri.ac.id

Yanuar Arafat
UIN Raden Fatah Palembang
yanuararafat1995@gmail.com

Abstract: Language was one of the media that played a significant role in creating and producing creative thoughts. However, the process of creative thinking was still rarely trained. The CTL learning model was thought to be effective for improving creative thinking skills. Besides, Creative thinking ability was influenced by gender factors also. This study aimed to examine the effect of the CTL learning model on students' creative thinking skills, based on gender. This research used quantitative research methods with an Ex-Post facto type. The respondents in this study amounted to 32 people consisting of 25 female students and 7 male students. The data analysis used the simple regression formula with the SPSS 22 program. The results of the simple regression test in this study showed that the CTL learning model affected the thinking ability of female students. The calculated T value was more significant than the T table (3.272> 2.06866) and did not affect male students' creative thinking ability because the T value was smaller than the T table (-1,965 <2,57058). The findings in this study were differences in the results of the regression test between male and female students due to different learning styles and brain structure factors between male and female students caused the role of the teacher in the school will determine the success of the students. This result shows that males and females have different thinking anyway.
Keywords: *Creative Thinking, CTL, Arabic Learning, and Gender.*

Abstrak. Bahasa adalah salah satu media yang memainkan peran penting dalam menciptakan dan memproduksi pemikiran kreatif. Namun, proses berpikir kreatif masih jarang dilatih. Model pembelajaran CTL dianggap efektif untuk meningkatkan keterampilan berpikir kreatif. Selain itu, kemampuan berpikir kreatif juga dipengaruhi oleh faktor gender. Penelitian ini bertujuan untuk menguji pengaruh model pembelajaran CTL terhadap kemampuan berpikir kreatif siswa, berdasarkan gender. Penelitian ini menggunakan metode penelitian kuantitatif dengan jenis Ex-Post facto. Responden dalam penelitian ini berjumlah 32 orang yang terdiri dari 25 siswa perempuan dan 7 siswa laki-laki. Analisis data menggunakan rumus regresi sederhana dengan program SPSS 22. Hasil uji regresi sederhana pada penelitian ini menunjukkan bahwa model pembelajaran CTL berpengaruh terhadap kemampuan berpikir siswi. Nilai T hitung lebih signifikan dibandingkan tabel T (3,272> 2,06866) dan tidak mempengaruhi kemampuan berpikir kreatif siswa laki-laki karena nilai T lebih kecil dari tabel T (-1,965 <2,57058). Temuan dalam penelitian ini adalah perbedaan hasil uji regresi antara siswa laki-laki dan perempuan karena gaya belajar yang berbeda dan faktor struktur otak antara siswa laki-laki dan perempuan menyebabkan peran guru di sekolah akan menentukan keberhasilan siswa. Hasil ini menunjukkan bahwa pria dan wanita memiliki pemikiran yang berbeda.
Kata Kunci: *Berpikir Kreatif, CTL, Pembelajaran Bahasa Arab, dan Gender*

INTRODUCTION

Creativity was essential in every aspect of human life. Creativity will give ideas to new things, either in the form of new theories or new ways that will provide many benefits for life. One of the cognitive characteristics of creativity was creative thinking ability. Creative thinking ability was one of the thinking skills that a person usually does. Creative thinking ability was one of the abilities that National Education wanted to develop. However, the process of creative thinking was rarely trained. Generally, the average person used less than one percent of their brain in the areas of creativity, memory, and learning. This idea was not following the demands of the Indonesian National Education concept, which directed learning activities to focus on students so that students can develop their potential also[1].

In reality, the learning that applied in the schools was still not encouraging students' creative thinking skills. The learning process just directed students to memorize information without understanding its meaning. Students in junior high school were forced to relate the information they received to everyday life and have not encouraged student creativity. Antika's findings of students' creative thinking stated that out of 56 students, only 7 students were in the very high category, 7 students were in the high category, 32 students were in the medium category, and 12 students were still in the low category[2].This study showed that not all students have excellent creative thinking skills.

Creative thinking ability helped students to create new ideas based on the knowledge and experiences they already have to solve problems from different points of view. Putra explained that creative thinking ability was a thought process to reveal new relationships, saw things from a new perspective, and form new combinations of two or more previously mastered concepts[3].This study was in line with the opinion of Inge, which stated that creative thinking was defined as a mental activity that a person used to build new ideas[4]. According to Munandar, creative thinking ability consisted of four aspects, namely; (1) Fluency or the ability to think fluently; (2) Flexibility or the ability to think flexibly; (3) Originality or original thinking ability; (4) Elaboration or the ability to elaborate[5].

Learning creative thinking skills needed to be integrated into every subject, including Arabic. Arabic was also one of the topics that were responsible for realizing the goals of National Education. In Indonesia, Arabic learning has developed rapidly; even learning started when children were in kindergarten to university. Either think of something simple or something complicated. Language and thinking were an interdependent relationship[6]. Language was used as a vehicle for expressing feelings and thoughts aesthetically and logically. The sharper the thinking power of a person, the more carefully the language was used.

Arabic learning had a duty to be able to compile appropriate and integrated learning to improve students' creative thinking skills and to respond to the challenges and demands. Language confusion and confusion in the thinking of students should not be tolerated. Language education, in particular, must strive to make a learning process that fosters interest, pride, and the ability to think critically and creatively as well as improved the skills of students in the language. The findings

[1] Undang-undang No. 20, 2003

[2] Antika, C. R. (2019). Tingkat Kreativitas Siswa dan Implikasinya Terhadap Program Pengembangan Kreativitas. Prosiding Seminar Nasional & Call For Paper Psikologi Pendidikan, 76-78.

[3] Putra, R. D., Rinanto, Y., Dwiastuti, S., & Irfa'i, I. (2016). Peningkatan Kemampuan Berpikir Kreatif Siswa melalui Model Pembelajaran Inkuiri Terbimbing pada Siswa Kelas XI MIA 1 SMA Negeri Colomadu Karanganyar Tahun Pelajaran 2015/2016. *Proceeding Biology Education Conference (ISSN: 2528-5742), Vol 13(1)* , (pp. 330-334).

[4] Inge, Putri, I. W., Hussen, S., & Adawiyah, R. (2017). Kemampuan Berpikir Kreatif Dalam Menyelesaikan Masalah Kesebangunan di SMPN 11 Jember (Creative Thinking Skill in Solving Simillarity Problem at Junior High School 11 of Jember). JURNAL EDUKAS, IV(3): 59-62.

[5] Munandar, U. (2009). Pemanduan Anak Berbakat: Suatu Studi Penjajagan. Jakarta: Rajawali Press.

[6] Wahyuni, D. (2016). Kreativitas Berbahasa dalam Sastra Anak Indonesia. Madah, Volume 7, Nomor2, 127-146.

of Sari and Mubaligh stated that one of the steps that can be taken to enhance creative thinking skills was through the learning process[7].

One of the learning models that was thought to be able to improve creative thinking skills was the contextual teaching and learning (CTL) learning model. Creative thinking ability was one of the unique characteristics of learning with the CTL model. Johnson identified eight characteristics of the CTL learning model, namely; (1) Making meaningful relationships; (2) Doing important work; (3) Learning to organize yourself; (4) Cooperating; (5) critical and creative thinking; (6) Caring for individuals; (7) Achieved high standards and; (8) Used of actual value. (Johnson, 2014) The CTL learning model was a learning concept that helped teachers link the material being taught with students' real-world situations and encouraged students to make a connection between the knowledge they had and its application in their lives as members of the family and society.[8]

In contextual classrooms, the teacher's job was to help students achieve their goals. That was, the teacher had more to do with strategy than with providing information. The teacher's job was to manage the class as a team that worked together to find something new for class members (students). With this concept, learning outcomes become more meaningful, and students' creativity was more developed. Because the learning process took place naturally in the form of activities for students to work and experience, not to transfer knowledge from teachers to students. This result showed that the contextual learning model was thought to be effective in improving students' creative thinking skills in learning Arabic. Following the results of Mantung research which showed the influence of the CTL learning model on students' creative thinking abilities[9].

Some of the studies above showed the influence of the CTL learning model on students' creative thinking abilities. Besides, several studies stated that there were differences in students' creative thinking abilities based on gender. Pramawati et al. reported that there was a significant difference between male students' creative thinking skills and female students. The average score of male students' creative thinking skills was better than the average score of female students' creative thinking skills (Pramawati et al. 2016). The findings of the research by Syarifah, et al. generally state that there was an influence of gender on students' metacognitive skills. where female students tend to have higher metacognitive skills than male students. (Syarifah et al. 2016) Gender differences of all kinds enthrall people, and so it was not astonishing that there was interest in the means women and men speak and whether there were linguistic gender differences. Everyone had their views on gender differences – in language and other aspects of social life.

Based on the research results above, the researchers suspect the influence of the CTL learning model on creative thinking abilities. However, the researchers have not found research that discusses the impact of the CTL learning model on students' creative thinking abilities in learning Arabic. Even though, based on the findings of Muzdalifah, he stated that the CTL learning model was good to be applied in all fields of study, including Arabic learning. (Muzdalifah, 2009)

From the description above, research on creative thinking in learning Arabic was an urgent matter. For this reason, the researcher wanted to test whether the CTL learning model affects students' creative thinking abilities in learning Arabic. Based on the results of the researchers' initial interviews with the Arabic teacher at MTsN Batu, the CTL learning model has become one of the learning models that have been applied in Arabic learning classes. For this reason, the purpose of this study was to examine how much effect the CTL learning model has on students' creative thinking abilities in learning Arabic-based gender.

---

[7] Sari, R. R., & Mubaligh, A. (2019). Scamper Sebagai Strategi Menulis Kreatif Bahasa Arab Abad 21. Arabi: Journal Of Arabic Study Vol. 4. No. 2, 179-187.

[8] Rusman. (2011). *Seri Manajemen Sekolah Bermutu Model-model Pembelajaran Mengembangkan Profesionalisme Guru.* Bandung: Rajagrafindo Persada

[9] Mantung, R. A., Hasnawati, & Lambertus. (2019). Pengaruh Pendekatan Contextual Teaching And Learning Terhadap Kemampuan Berfikir Kreatif Matematis Siswa Kelas VIII SMP Negeri 2 Konawe Selatan. *Jurnal Penelitian Pendidikan Matematika Volume 7 NO. 1*, 113-126.

METHOD

This variable (Sappaile, 2010)would be described as operationally for measurement and data collection. The operational definition of the CTL learning model was a learning model that connected students' abilities with situations experienced in the real world of students. While the ability to think creatively was a person's ability to find new ideas to be able to solve problems in everyday life.

The subject in this study is 32 students. The number of female students was 25 people, and male students were 7 people. A complete description of the subject composition is in table 1.

Table 1 Characteristics of Respondents

No.	Gender	N	%
1	Females	25	78,125 %
2	Males	7	21,875%
	Total	**32**	**100 %**

Source: Results of the MTs Questionnaire Distribution

There were 2 types of data measured in this study. Therefore, data collection was carried out in two ways: (1) the CTL learning model, as measured by a questionnaire prepared by the researchers, refers to Johnson's CTL learning model indicator. This questionnaire researchers made based on the principles of the Likert scale with a total of 32 items consisting of 5 alternative answers, namely: strongly agree (SA), agree, (A), Sometimes (S), Rarely (R), Never (N); (2) Creative thinking abilities as measured by a creative thinking test. The questions consisted of 6 item questions developed based on Torrance's (1999) verbal creative thinking test. Each subtest measured a different aspect of creative thinking. The six subtests were; (1) Starting words; (2) Word composition; (3) Three-word sentence formation; (4) Disclosure of the same characteristics; (5) The use of various objects; (6) What was the result? The test questions were validated by two experts in Arabic, with a validity score of 92 percent.

After collecting data, proceed to the data analysis stage. The stages of data analysis in this study were as follows:

1.   Determination of the scores on the questionnaire and test items
        The researcher made a scale of values from 0 to 4 based on the applicable scoring norm. Then enter it into the data tab and calculate the total number of scores and the total score of the items. The researcher grouped the data based on the gender of the students and then tested the effect with simple regression based on the data that had been grouped.
2.   Regression Test
        The next stage was to perform a simple regression test to determine the effect of variable X (CTL learning model) on variable Y (creative thinking ability). The researcher conducted a regression test using SPSS 22. Based on the results of the normality test, the data in this study were normally distributed and homogeneous. As the basis for decision-making in regression analysis by looking at the significance value (Sig.) If the significance value (Sig.) was less than <0.05 probability, it did not mean that there was no effect of the CTL learning model (X) on creative thinking abilities (Y). Conversely, if the significance value (Sig.) was more significant than the 0.05 probability, it was mean that there was an effect of the CTL learning model on creative thinking skills (Y).

After carrying out research and conducting data analysis tests, simple regression test results were obtained with SPSS 22 as in the table below:

Table 2 Female Student Coefficient Value

Coefficients					
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.009	6.484		.927	.364
	CTL	.149	.046	.564	3.272	.003
a. Dependent Variable: Creative Thinking Female Students						

Based on the table above, the regression coefficient was 0.149, and a constant was 6.009. Then the form of the regression equation was y = 6.009 + 0.149 X1. While the T value obtained was 3.272> T table 2.06866 means that the CTL learning model affected the creative thinking of female students. The effect can be seen in table 3.

Table 3 Female Student Anova Test Results

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	109.464	1	109.464	10.705	.003[b]
	Residual	235.176	23	10.225		
	Total	344.640	24			
a. Dependent Variable: Creative Thinking Female Students						
b. Predictors: (Constant), CTL, Female Students						

The magnitude of the influence of the CTL learning model on female students' creative thinking can be seen in table 4.

Table 4 The magnitude of the influence of the CTL Model on Female Student Creative Thinking

Model Summary				
Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.564[a]	.318	.288	3.19766
a. Predictors: (Constant), CTL				

Based on the output above, the R square value or correlation index is 0.318, meaning that the CTL learning model variable affects the creative thinking of female students by 31.8% and other factors influence the remaining 68.2%. The test results of the effect of the CTL learning model on male students' creative thinking. To find out the impact of the CTL model variable on female students' creative thinking and how much influence it has, then it was analyzed by simple regression or through the partial test (t-test) with SPSS 22. The simple regression test in Table 5 can be seen:

Table 5 Male Student Coefficient Results

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	56.541	15.154		3.731	.014
CTL	-.221	.112	-.660	-1.965	.107
A. Dependent Variable: Creative Thinking Male Students					

Based on the table above, the regression coefficient was -0.221, and a constant was 56.541. Then the form of the regression equation was y = 56.541 + (- 0.221). Meanwhile, the T value was -1.965 <2.57058; it means that the CTL model did not affect male students' creative thinking because the T value was smaller than the T table

RESULT AND DISCUSSION
Contextual Teaching and Learning Model

Contextual Teaching and Learning was an all-inclusive learning process that aimed to teach students to meaningful teaching resources that are associated with real-life contexts, and correlated to individual, religious, social, economic, and cultural environments. So that students acquired knowledge and skills that can be practical and transferred from one problem context to another. (Hanafiah & Suhana, 2010) According to Mulyono, contextual learning was a learning concept that

emphasized the relationship between learning material and the real world, so that students were able to connect and applied competency learning outcomes in everyday life[10].

CTL was a comprehensive system, which consists of interconnected parts. When these parts were intertwined with each other, an effect that exceeds the yield of the elements given separately will result. Each piece of this different CTL learning model contributed to helping students understand schoolwork. Together they form a system that allowed students to see the meaning in it, and to remember academic material.

The context in the sense of CTL had more meaning than just the linkage of a specific physical environment at a particular time. The context in the mind of CTL included the mental and emotional contexts of individuals, social contexts, and cultural contexts. Thus, contextual meaning has a broader sense than applied learning. Applicative learning implied that something that students learned in school could be used in different situations, for example, to other concepts, different subjects, or also in everyday life. CTL means that learning activities considered all related elements that affect the learning process of children.

CTL components according to Johnson B. Elaine (2002) included: (a) Establishing meaningful relationships (b) Doing meaningful work (c) Doing self-regulated learning (d) Collaborating (e) Critical thinking and being creative (f) Providing individual services (g) Strive to achieve high standards (h) Use authentic assessment. (Rusman, 2011) Learning Process with CTL was (a) Learning is not just memorizing, but experiencing and having to construct knowledge; (b) Science is a collection of facts or propositions that are integral and at the same time can be used as applicable skills; (c) Students have different attitudes in dealing with new situations and are accustomed to learning to find something to solve problems in life; (4) Continuous learning can build brain structures in line with the development of received knowledge and skills. (Trianto, 2015)

CTL Learning models had advantages and disadvantages. The benefits of CTL, among others, are that there was no need to pay a lot of money. The learning model used various learning resources, learning settings were not only in class, and any media was biased for learning, in principle the people around, Old newspapers and magazines were all media and learning resources.

Based on the philosophical foundation of learning with a CTL learning model, it was explained that constructivism was learning that emphasized learning that was not just memorizing. Students must construct knowledge in their minds. Ability cannot be broken down into separate facts or proportions but reflects applicable skills. In that context, then students needed to understand what learning means, what were the benefits, what status were they in and how to achieve it. Students are required to realize that what they learn was useful for their later life[11].

In this CTL learning model, it was not necessary to change the existing curriculum, because the CTL learning model was just a learning model. Besides that, CTL learning models can also be applied in large classes (many students). While the disadvantage of this learning model was the lack of teacher skills in choosing learning methods so that contextual learning strategies become obstructed and do not match what was the goal. Teachers find it difficult to organize the space where the teaching and learning process takes place because there were too many students, but if there were few students, this right was not a problem.

On the other hand, the existing media in schools were also inadequate, so teachers will find it challenging to explain the subject matter. In essence, the teaching and learning process was a process of communication between students and teachers. One of the efforts to smooth the communication process was the use of integrated media in the teaching and learning process because the function of the media in these activities was not only as a presenter of information stimulus, attitudes, and others, as well as to improve harmony in receiving information. In some instances, the media also functions to regulate progress steps and provide feedback. In a classroom that used CTL learning models, the teacher's job was to help students achieve their goals. That was, a teacher deals more with learning strategies/methods than providing information.

---

[10] Mulyono. (2011). *Strategi Pembelajaran Menuju Efektivitas Pembelajaran di Abad Global.* Malang: UIN Maliki Press.
[11] Basyiruddin, & Asnawi. (2002). *Media Pembelajaran.* Jakarta: Ciputat Pres.

Creative Thinking Ability

Thinking was an activity that humans always do, even when they are asleep. For the brain, thinking and problem-solving was the most critical work, even with unlimited capabilities. The thinking was one of the most important forces and was a characteristic that distinguishes humans from animals. According to Sardiman, the thought was a mental activity to be able to formulate an understanding, synthesize and draw conclusions.[12] Purwanto argued that thinking was an activity of the human being that leads to the creation of a goal-oriented goal.[13]

According to Wallace Monander, the steps of the creative thinking process include four stages, namely: (a) Preparation stage, i.e. process stages. A person prepares to solve problems by studying, thinking, searching for answers, asking questions to others, and so on; (b) The incubation stage, i.e. the research activities and gathering data/information did not continue. In this stage, the individual is as though staying away from the problem in a sense. The was not thinking about the situation in some conscious way but keeping it in a pre-conscious nature. The incubation stage was necessary, and the meaning was significant The process by which inspiration arises was the starting point for something new inventions or creations that come before the conscious or appear in a state of the whole subconscious from; (c) The stage of illumination, which is the stage of the emergence of "insight". (Munandar, 2009) When new inspiration or ideas arise, along with the psychological processes that initiated and followed the emergence of brand new inspiration or ideas.

The verification stage, or also called the evaluation stage, was the stage in which the new idea or creation must be tested against reality. Here critical thinking was required and convergent. In other words, the process should be diverging (creative thinking) followed by the process of convergence (critical thinking). Creative thinking was the ability of a person that is not necessarily present or ingrained from birth. Still, for judgment, the ability to think creatively must use the references that have been made. Munandar argued that the capacity for creative thinking was developed as the ability to reflect aspects as follows; (a) Thinking fluently that causes someone to come up with many ideas, answers and solutions to a problem or question; (b) Flexible thoughtful or flexibility that causes someone to be able to produced ideas, answers, or questions varies; (c) Original thinking (original thinking) that causes a person to be able to give idea to new and unique expressions or able to find uncommon combinations of one's usual essentials; (d) The detailed ability that causes a individual to be able to enhance and enrich the ideas.

Gender-Based

Websters New World Dictionary defines gender as "a distinct difference between men and women in relations of values and performances." In the Encyclopedia of Women explained that gender was a cultural concept that seeks to create confusion regarding roles, behaviors, mentalities and emotional traits between men and women that develop in society. According to Coates, gender was an Introduction that says sex as cultural expectations for men and women. (Coates, 2016) Men were mechanically perceived as at the emotion of culture, with women being bordering or even indiscernible. Two things affect the biological tendency of the male brain not to act before speaking. Lakof said that linguistics had approached language and gender from a variety of perspectives. These can be considered the discrepancy approach, the supremacy approach, the transformation approach, and the dynamic or communal constructionist approach.

Gender traits are expected traits and behaviors in men and women based on values, culture, and community norms at a specific time. Gender roles are what they should be, what is appropriate, and what is not applicable to do based men and women on the values, culture, and norms of society at that time inevitable. For example, men work to search earner, leader, director, president. Meanwhile, women are to be housewives (cooking, washing and parenting), teachers, nurses,

[12] Sardiman, A. M. (2002). *Interaksi dan Motivasi Belajar Mengajar.* Jakarta: PT.Rajagrafindo Persada.
[13] Purwanto, N. (2007). *Psikologi Pendidikan.* Bandung: PT. Rosdakarya.

secretaries, and it is kind. The gender domain is a space for men and women to do their part. This realm distinguishes the domestic and public domains. Realm domestic was a family area such as a kitchen, wells and mattresses. In contrast, public spaces are common areas where work is productive and economical, like working in offices, markets, malls, and others.[14]

The following was a theoretical study based on data exposure and research results. In this section, the researcher tried to consult the effects of data exposure and research results with theories that have been used as a basis for thinking during the research process. In this study, the researcher found that there were differences in the effect of variable X (CTL learning model) on variable Y (creative thinking ability) when grouped by gender. The CTL learning model affects female students' creative thinking abilities but did not influence male students' creative thinking abilities. This result showed that the CTL learning model was less suitable for use in large classes and with various student backgrounds.

The result of this study was in line with Piaw's findings which stated that gender influenced students' creative thinking.[15] This study was in line with Vassilou's opinion also, who noted that gender was one of the factors that influence the achievement and improvement of student learning competencies. According to Vassilou, female students generally had higher results when compared to males. In recent years in many countries, there have been problems related to gender, namely a crisis of masculinity which was shown by the low learning outcomes of male students on exams.[16]

The results of this study contradict the findings of Hodiyanto in his research which stated that there was no difference in students' creative thinking abilities based on gender. (Hodiyanto, 2014) and also with the findings of Himmah et al., which stated that gender did not affect students' creative thinking skills. (Himmah & Mahanal, 2017) There were differences in the effect of the CTL learning model on creative thinking skills between male and female students, possibly influenced by differences between male and female brains. Such conditions must make their learning methods and styles different. In line with Amin's research, in the learning process, male students were often ignorant, not paying attention, not calm, but they listened carefully and processed the information conveyed by the teacher. When he made a mistake, male students will find it easier to recognize through stimuli (sound, reprimand, or touch rather than emotional expression).

Meanwhile, female students were more comfortable to reprimand; it was enough to bring up expressions such as glaring, shaking their heads, and so on. Because of their high memorization skills, female students also tend to prefer to learn and be able to learn things in a way that promotes communication (speaking, writing, discussion, etc.). While males because their memorization was not like girls, they were happy and had to learn in a pattern. who were able to build imaginary structures of concepts in their minds through practicum, hands-on activities, making object designs, and so on, it is not enough just by reading, and discuss, like female students.[17]

Parents and educators must consider these differences in providing appropriate teaching for students and children. Wood explained that in men, their left brain was more developed so that they were able to think logically, thought abstractly, and thought analytically. In women, their right brain was more developed, so they tend to be active in artistic, holistic, imaginative, intuitive thinking, and some visual abilities.[18]

Differences in the brain structure of men and women also necessitate different educational patterns. Axiologically, understanding the differences in the construction of the male and female brains will provide us with a basis for making adjustments in educational practices that were more

---

[14] Azisah, S., Mustari, A., Himayah, & Masse, A. (2016). *Kontekstualisasi Gender, Islam Dan Budaya.* Makassar: Seri Kemitraan Universitas Masyarakat (KUM) UIN Alauddin Makassar.

[15] Piaw, C. Y. (2014). Effects Of Gender And Thinking Style On Students' Creative Thinking Ability. *Procedia Social And Behavioral Science 116*, (pp. 5135-5139).

[16] Vassilou, A. (2009). *Gender Differences in Educational Outcomes.* Europe: Eurydice.

[17] Amin, M. S. (2018). Perbedaan Struktur Otak dan Perilaku Belajar Antara Pria dan Wanita; Eksplanasi dalam Sudut Pandang Neuro Sains dan Filsafat. *Jurnal Filsafat Indonesia, Vol. 1 No. 1*, 38-43

[18] Suharyani, E. D. (2012). Penerapan Pendekatan Klasifikasi untuk Meningkatkan Penguasaan Konsep Dunia Tumbuhan dan Penalaran Siswa SMA Berdasarkan Gender. Tesis Program Studi Biologi UPI Bandung.

in line with student characteristics. Some of the things that can be taken include: (1) At the primary education level, there should be more female teachers, because female teachers are more patient and friendly when dealing with students, while for secondary schools, there should be more male teachers or equal, (2) Separating students in male and female classes, so that it is easier for them to learn according to their character, (3) Prepare male teachers for male classes, and vice versa. (4) Suppose the class continues to unite between males and girls. In that case, the teacher must teach in a combined way, to facilitate differences in the learning methods of male and female students. (5) The brain will optimally absorb information when it is relaxed (calm), so before learning begins, students must be invited to do relaxation activities both *dzikir*, self-reflection, and so on.

In line with that, the role of the teacher in the school will determine the success of the students. The key to the success of educational activities lies in teacher-teaching activities that can make the student learning process run well following the learning objectives. Another factor that developed students' creative thinking ability was the family's factor. Better-educated parents provide their children with more significant support and cognitive stimulation than children from socially disadvantaged homes receive. Previous studies by Jankowska and Karwowski's finding said that family SES was related to the initial level of children's creative thinking but unrelated to its growth.[19]

CONCLUSION

From the research results, it can be concluded that the Arabic learning model affected the creative thinking ability of female students because the T value was more significant than the T table with the number 3.272> T table 2.06866. While the results for male students showed a T value smaller than T table with the number -1.965 <2.57058, it was mean that the CTL model did not affect male students' creative thinking because the calculated T value was smaller than the T table. The findings in the study were differences in the results of the regression test between male and female students due to different learning styles and brain structure factors between males and females aspect. Recommendations for future researchers were to be able to research by adding other variables such as student learning styles or by using other learning models such as HOTS-based learning models or family factors.

BIBLIOGRAPHY

Amin, M. S. (2018). Perbedaan Struktur Otak dan Perilaku Belajar Antara Pria dan Wanita; Eksplanasi dalam Sudut Pandang Neuro Sains dan Filsafat. *Jurnal Filsafat Indonesia, Vol. 1 No. 1*, 38-43.

Antika, C. R. (2019). Tingkat Kreativitas Siswa dan Implikasinya Terhadap Program Pengembangan Kreativitas. *Prosiding Seminar Nasional & Call For Paper Psikologi Pendidikan*, 76-78.

---

[19] Jankowska, M. D., & Karwowski, M. (2018). Family Factors and Development of Creative Thinking. *Personality and Individual Differences*, 1-5.

Azisah, S., Mustari, A., Himayah, & Masse, A. (2016). *Kontekstualisasi Gender, Islam Dan Budaya*. Makassar: Seri Kemitraan Universitas Masyarakat (KUM) UIN Alauddin Makassar.

Basyiruddin, & Asnawi. (2002). *Media Pembelajaran*. Jakarta: Ciputat Pres.

Bean. (1995). *Cara Mengembangkan Kreativitas Anak*. Jakarta: Bina Rupa Aksara.

Coates, J. (2016). *Women, Men and Language; A Sosiolinguistic Account of Gender Differences in Language*. Graphicraft: Hong Kong.

Hanafiah, N., & Suhana, C. (2010). *Konsep Strategi Pembelajaran* (2 ed.). Bandung: Refika Aditama.

Himmah, S. F., & Mahanal, S. (2017). Pengaruh Model Pembelajaran Biologi Berbasis Reading-Concept MapReciprocal Teaching Dan Gender Terhadap Keterampilan Berpikir Kreatif Siswa Kelas X SMA Negeri 7 Malang. *Pros. Seminar Pendidikan IPA Pascasarjana UM, Vol. 2* (pp. 563-572). Malang: Pascasarjana UM.

Hodiyanto. (2014). Meningkatkan Kemampuan Berpikir Kreatif Siswa Melalui Pembelajaran Pemecahan Masalah Ditinjau Dari Gender Pada Materi Himpunan. *Jurnal Pendidikan Informatika Sains, Vol. 3, No. 1*, 27-41.

Inge, Putri, I. W., Hussen, S., & Adawiyah, R. (2017). Kemampuan Berpikir Kreatif Dalam Menyelesaikan Masalah Kesebangunan di SMPN 11 Jember (Creative Thinking Skill in Solving Simillarity Problem at Junior High School 11 of Jember). *JURNAL EDUKAS*, IV(3): 59-62.

Jankowska, M. D., & Karwowski, M. (2018). Family Factors and Development of Creative Thinking. *Personality and Individual Differences*, 1-5.

Johnson, E. B. (2014). *Contextual Teaching and Learning*. Thousand Oaks: Corwin Press, Inc,.

Lakoff, R. (1975). *Language and Woman's Place*. New York: Harper and Row.

Mantung, R. A., Hasnawati, & Lambertus. (2019). Pengaruh Pendekatan Contextual Teaching And Learning Terhadap Kemampuan Berfikir Kreatif Matematis Siswa Kelas VIII SMP Negeri 2 Konawe Selatan. *Jurnal Penelitian Pendidikan Matematika Volume 7 NO. 1*, 113-126.

Mulyono. (2011). *Strategi Pembelajaran Menuju Efektivitas Pembelajaran di Abad Global*. Malang: UIN Maliki Press.

Munandar, U. (2009). *Pemanduan Anak Berbakat: Suatu Studi Penjajagan*. Jakarta: Rajawali Press.

Muzdalifah. (2009). Upaya Membelajarkan Siswa Berbahasa Arab Dengan Pendekatan Contextual Teaching And Learning (Ctl) (Studi Kasus Di Madrasah Negeri 8 Cakung Jakarta Timur). *E-Theses UIN Syarif Hidayatullah*, 81.

Nurani, D. (2014). Pengaruh Model Pembelajaran Contextual Teaching and Learning Terhadap Keterampilan Berfikir Kreatif Siswa Pada Pembelajaran Biologi Kelas X SMAN Bangunrejo Tahun Pelajaran 2013/2014. *Bioedukasi Jurnal Pendidikan Biologi Universitas Muhammadiya Metro Vol. 5. No. 2*, 79-86.

Piaw, C. Y. (2014). Effects Of Gender And Thinking Style On Students' Creative Thinking Ability. *Procedia Social And Behavioral Science 116*, (pp. 5135-5139).

Purwanto, N. (2007). *Psikologi Pendidikan*. Bandung: PT. Rosdakarya.

Putra, R. D., Rinanto, Y., Dwiastuti, S., & Irfa'i, I. (2016). Peningkatan Kemampuan Berpikir Kreatif Siswa melalui Model Pembelajaran Inkuiri Terbimbing pada Siswa Kelas XI MIA 1 SMA Negeri Colomadu Karanganyar Tahun Pelajaran 2015/2016. *Proceeding Biology Education Conference (ISSN: 2528-5742), Vol 13(1)* , (pp. 330-334).

Rusman. (2011). *Seri Manajemen Sekolah Bermutu Model-Model Pembelajaran Mengembangkan Profesinalisme Guru* (3 ed.). Jakarta: Rajagrafindo.

Rusman. (2011). *Seri Manajemen Sekolah Bermutu Model-model Pembelajaran Mengembangkan Profesionalisme Guru*. Bandung: Rajagrafindo Persada.

Sappaile, B. I. (2010). Konsep Penelitian Ex-Post Facto. *Jurnal Pendidikan Matematika, Volume 1 Nomor 2*, 105.

Sardiman, A. M. (2002). *Interaksi dan Motivasi Belajar Mengajar*. Jakarta: PT.Rajagrafindo Persada.

Sari, R. R., & Mubaligh, A. (2019). Scamper Sebagai Strategi Menulis Kreatif Bahasa Arab Abad 21. *Arabi: Journal Of Arabic Study Vol. 4. No. 2*, 179-187.

Suharyani, E. D. (2012). Penerapan Pendekatan Klasifikasi untuk Meningkatkan Penguasaan Konsep Dunia Tumbuhan dan Penalaran Siswa SMA Berdasarkan Gender. *Tesis Program Studi Biologi UPI Bandung.*

Trianto. (2015). *Mendesain Model Pembelajaran Inovatif Progresif dan Kontekstual.* Jakarta: Kencana Prenada Media.

Undang-undang No. 20. (2003). *Sistem Pendidikan Nasional.*

Vassilou, A. (2009). *Gender Differences in Educational Outcomes.* Europe: Eurydice.

Wahyuni, D. (2016). Kreativitas Berbahasa dalam Sastra Anak Indonesia. *Madah, Volume 7, Nomor2*, 127-146.