The Effort of Developing Students' Creative Thinking Ability in Elementary School: Needs Analysis

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ABSTRAK

Pembelajaran di sekolah dasar dilaksanakan dengan memberikan keteladanan, membangun kemauan, serta mengembangkan kreativitas siswa dalam proses pembelajaran. Itulah upaya-upaya dalam mempersiapkan generasi muda yang kreatif dan kompetitif di era globalisasi. Untuk mewujudkan tujuan pendidikan di sekolah dasar diperlukan suatu inovasi model pembelajaran yang dapat mengembangkan aspek berpikir kreatif siswa, sehingga tercipta kreativitas yang dapat diimplementasikan dalam kehidupan sehari-hari di masyarakat. Berdasarkan pengamatan terhadap proses pembelajaran yang telah dilakukan belum ada sinergi antara tujuan dan metode serta model pembelajaran yang digunakan, apalagi proses pembelajaran yang dilaksanakan masih berpusat pada guru. Penelitian ini bertujuan untuk mengetahui: (1) Pentingnya pengembangan kemampuan berpikir kreatif, (2) kebutuhan siswa terhadap sumber belajar, (3) kebutuhan siswa terhadap model pembelajaran alternatif, (4) minat belajar siswa. model yang mengembangkan kemampuan berpikir kreatif, (5) kebutuhan guru terhadap sumber belajar, (6) kebutuhan guru terhadap model pembelajaran alternatif, (7) minat guru terhadap model pembelajaran yang mengembangkan kemampuan berpikir kreatif siswa. Metode yang digunakan dalam penelitian ini adalah deskriptif kualitatif dengan pengumpulan data berupa angket kepada guru dan siswa. Hasil penelitian ini menunjukkan bahwa baik guru maupun siswa menyepakati alternatif model pembelajaran yang sesuai dengan kebutuhan siswa untuk mengembangkan pemikiran kreatif. Dalam kaitannya dengan pengembangan model pembelajaran berpikir kreatif sekolah dasar dapat dikatakan dapat diterima atau disetujui.

ABSTRACT

Learning in elementary school is implemented by giving model, building willingness, as well as developing the students' creativity in the learning process. Those are the attempts in preparing creative and competitive young generation in globalization era. In order to create educational aims in the elementary school, an innovation on learning model that can develop the students' creative thinking aspect is required, so that it creates creativities that can be implemented in daily life in the society. Based on the observations on learning process that have been done there was no synergy yet between the aim and method as well as learning model that was used, moreover, learning process that was implemented was still teacher centered. The aims of this research are to find out: (1) The importance of creative thinking ability development, (2) students' needs on learning resources, (3) students' needs on alternative learning model, (4) students' interest in learning model that develops creative thinking ability, (5) teachers' needs on learning resources, (6) teachers' needs on alternative learning model, (7) teachers' interest on learning model that develops students' creative thinking ability. Method that was used in this research is descriptive qualitative data gathering in form of questionnaires to teachers and students. The results of this research revealed that both the teachers and the students agreed on alternative learning model that is appropriate with the students' needs to develop creative thinking. In relation to the development of elementary school creative thinking learning model can be considered as acceptable or approved.

1. INTRODUCTION

The development of 21st century life in various aspects, requires critical thinking and problem solving skills, creativity, communication skills, and ability to work collaboratively (Antara et al., 2020; Erdogan, 2019; Halverson, 2018). One of the 21st century skills that is important to develop is creativity (Kaufman et al., 2007; Wang et al., 1999). Educational institutions are the right place to develop creative talents and students' ability to think creatively (Hong & Milgram, 2010; Lee, 2005). Education is a fundamental process for the nation's development (Mexdadoris & Jama, 2020; Nurulsari & Suyatna, 2017). To develop creative thinking skills in this globalization era, such as making ideas, making assumptions, problem solving skills and building self-efficacy, creative learning is needed at the heart (Kaufman et al.,

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2007; Riga & Chronopoulou, 2014; Seng, 2000). One of the aims of education is to transform students into creative people. Creative people are those who possess originality in thinking and those who create new ideas, as well as ability to elaborate (develop, enrich, intricate) an idea. This definition emphasizes more on change process aspect innovation and variation (Munandar, 1999; Webster, 1990). The emphasis on process aspect is highly essential in creating the aim of education that is to develop students; creative thinking ability especially in elementary school level, it is because with the right process the students can train to develop their thinking in solving a particular problem, to create an original idea. In a world dominated by technological innovations, creativity is a critical component; human skills and people's powers of creativity and imagination are key resources in a knowledge (Robinson., 2000; Setyarini et al., 2020; Tan et al., 2020).

Some of the students' and teachers' weaknesses in creative thinking in the development of students; creative thinking ability are as follows (Damayanti & Sumardi, 2018; Fatah et al., 2016; Lince, 2016; Piaw, 2014): 1) in the learning process, the teachers only focus in final activity that is intelligence and learning achievement test that covers assignments that have to be done with correct answers, without giving learning that encourage the students during that process to be able to develop their creative thinking ability. It makes the students getting used to divergent thinking or only focus on one correct answer, meaning that there is only one answer and there is no other alternative answer. 2) At most of the time, teachers too often use multiple choice in test in every learning subject. Consequently, the students only focus on the correct answer and that do not train the students to develop their creative thinking ability. 3) The emphasize on learning approaches that are used by the teachers is on the students' behavior change from stimulus given by teachers. Most of the time, teachers use praises and punishment to change those students' behaviors. It makes the students become used to give only the correct answer to gain praises, and the other students are not courageous to answer because they are afraid of making mistakes and getting punishment. 4) The students do not really understand sentences as knowledge concept delivered by teachers, students are unable to differentiate the information accepted with the development of real life, they are less able to apply the knowledge and idea that they know, they are unable to use various ways and strategies in planning to problem solving, they are unable to draw conclusions or to bring it back to the problem being searched.

The teachers need to realize that during this whole time classroom learning is merely teaching and learning, merely as knowledge transfer, not as personality shaping process and how that learning process itself can develop the level of their thinking ability. We often forget to only see education as "transfer of knowledge", and forget its other function, such as the development of the students' intellectuality and thinking ability. Without the presence of the processes of personality shaping, intellectuality and thinking ability, education does not fulfill its function fully. Thinking is defined as the action of mind to process knowledge that has been obtained through senses and is aimed at achieving truth, helping to formulate or solve problem, making decision, or fulfilling desire to understand a particular problem (Khodijah, 2006; Maxwell, 2004; Rakhmat, 2011). In classroom context, developing thinking ability can be done by giving chances for students of involving them in a problem or subject and by helping them to ask questions, taking risks, becoming imaginative and are being glad to explore options as well as innovating (Grainger & Barnes, 2006). Creativity does not happen in someone's head, but in interaction between individual thinking and socio-cultural context. That is the product of people's judgment that involves interaction among domains, someone and areas (Csikszentmihalyi, 1996; Grainger & Barnes, 2006). An individual creative thinking ability shows that individual's creativity.

Thinking creatively is individual's ability to think about what is thought by everyone, so that that individual is able to work on something that has not yet done by everyone (Kartika et al., 2019; Wahyudi et al., 2020). Sometimes, thinking creatively lies within innovation that helps him/her to do older things in a new way. But, the point is seeing the world through many new eyes so that new solutions emerge, that is what gives plus point (Dewi & Mashami, 2019). Based on the explanations above, it can be concluded that the definition of thinking creatively is someone's ability to create new idea or initiative that makes him/her able to attain various aims in his/her life (Maxwell, 2004; Mumford & McIntosh, 2017). Students' creative thinking can be materialized if there is support from surroundings, or if there is strong urge within him/herself (internal motivation) to produce something, creative thinking can be developed in supportive surroundings. The focus of education must be on creating people who are capable of thinking and doing new things, not simply repeating what past generations have done (Fisher, 1993; Septian et al., 2020). In the context of the classroom, developing opportunities for children to 'possibility think' their way forwards is therefore critical. This will involve you in immersing the class in an issue or subject and helping them ask questions, take risks, be imaginative and playfully explore options as well as innovate (Craft, 2001; Davidovitch & Milgram, 2006). In order to be creative children do need considerable

knowledge in a domain, but 'creativity and knowledge are two sides of the same psychological coin, not opposing forces' and imaginatively feed each other (Claxton, 1997; Gardner, 1999).

The aims of this research are to find out: (1) The importance of creative thinking ability development, (2) students' needs on learning resources, (3) students' needs on alternative learning model, (4) students' interest in learning model that develops creative thinking ability, (5) teachers' needs on learning resources, (6) teachers' needs on alternative learning model, (7) teachers' interest on learning model that develops students' creative thinking ability.

2. METHODS

The focus of this research is the analysis of the potentials and the need for the developing of the learning model that will be used as the foundation in the development of creative thinking models in primary schools. The method used is observation using a questionnaire instrument for students' and teachers'. Whereas data analysis technique that was used was qualitative descriptive, where the researcher is able to describe and explain data that were gathered (Sugiyono, 2014). Qualitative descriptive approach is an approach in research that is oriented in natural indication because its orientation is likewise, so that its nature is naturalistic and based on or has the quality of naturalness. To analyze the results of the questionnaire data, the researchers made 4 ranges of rating scales from each indicator, then the results are on average to determine the level of student needs for the development of creative thinking learning models. Research subjects of this research consisted of six subjects groups. Where the details of the research subjects were SDN Babadan Lor 1 (25 students of grade IV), SDN Mejayan 1 (32 students of grade IV), SDN Balerejo 1 (35 students of grade IV), SDN Widodaren 1 (27 students of grade IV), SDN Geneng 1 (29 students of grade IV) dan SDN Ngawi 1 (34 students of grade IV). With the total amount of 182 students. Each of the research subject group is taken from grade IV of Public Elementary school in Ngawi Regency and Madiun Regency that covered students and classroom teachers. Data in this research was data to find out the needs on the development on learning model in increasing the students' creative thinking that were gathered through observations and questionnaires. The questionnaires instrument used *likert* scale. This research was done in Public Elementary Schools in Ngawi regency and Madiun Regency.

3. RESULT AND DISCUSSION

Results

Needs analysis towards the development of learning model in increasing creative thinking ability of grade IV students of Public Elementary Schools in Ngawi Regency and Madiun Regency with 192 respondents revealed that: (1) The importance of the development of creative thinking ability, from the research result, 67 students or 36.9% of the students stated that they strongly agree, 105 students or 57,7% of the students stated agree, whereas 7 students or 3% of the students disagree. For the average score of the development of creative thinking ability component was 3,3 with agree category with the development of creative thinking ability. (2) Students' needs on learning resources, from the analysis results, it was revealed that 42 students or 23,1% stated that they strongly agree, 123 students or 67,6% of the students agreed, whereas 15 students or 8,2% stated disagree, and 2 students or 1,1% stated their disagreement. For the average score of students' needs on learning resources component was 3,1 with the category of agree with the importance of learning resources towards the development of creative thinking ability. (3) Students' needs on learning model alternative, from the result of analysis it was known that 39 students or 21,5% stated that they strongly disagree, 130 students or 71,4% agreed, whereas 10 students or 5,5% stated that they disagree. For the average score of students' needs on learning model alternative component was 3,1 with the category of agreed on the importance of learning model alternative in the development of creative thinking ability. (4) Students' interest on learning model that develops creative thinking ability, from the analysis results, it was revealed that 58 students or 31,9% stated that they strongly disagree, 112 students or 61,6% agreed, while 7 students or 3,8% stated they disagree, and 5 students or 2,7% stated they strongly disagree. For the average score of the component of students' interest on learning model that develops creative thinking ability was 3,2 with the category of agree and they were interested in learning model that develops creative thinking ability. Table 1 shows the results of needs analysis toward the development of creative thinking ability (students).

Table 1. Analysis Results of Needs Analysis Toward the Development of Creative Thinking Ability (Students)

No.	Category	The Importance of the Development of Creative Thinking Ability		Students' Needs on Learning Resources		Students' Needs on Learning Model Alternative		Students' Interest on Learning Model that Develops Creative Thinking Ability	
		Amount	%	Amount	%	Amount	%	Amount	%
1	STS	3	1,6 %	2	1,6 %	3	1,6 %	5	1,6 %
2	TS	7	3,8 %	15	3,8 %	10	3,8 %	7	3,8 %
3	S	105	57,7 %	123	57,7 %	130	57,7 %	112	57,7 %
4	SS	67	36,9 %	42	36,9 %	39	36,9 %	58	36,9 %
Average Score		**3,3**	**Agree**	**3,1**	**Agree**	**3,1**	**Agree**	**3,2**	**Agree**

Notes: STS (Strongly Disagree), S (Agree), TS (Disagree), SS (Strongly Agree)

Needs analysis on the development of learning model in developing creative thinking ability of grade IV students of Public Elementary School in Ngawi Regency and Madiun Regency with the respondents of 6 teachers of grade IV showed that: (1) The importance of the development of the students creative thinking, from the analysis result it was revealed that four teachers or 66,6% were strongly agree, two teachers or 33,4% stated that they agreed, and no teachers who disagree or strongly disagree with the percentage of 0%. For the average score of the importance of the development of creative thinking ability component was 3,6 with the category of agreed with the development of creative thinking ability. (2) Teachers' needs on learning resources, from the analysis result, it was revealed that three teachers or 50% stated that they strongly agreed, three teachers or 50% agreed, and none of the teachers stated that they disagree or highly disagree with the percentage of 0%. For the average score of the component of teachers' needs on learning resources was 3,5 with the category of agreed with the importance of learning resources towards the development of creative thinking ability. (3) Teachers' needs on alternative learning model, from the analysis results it was revealed that 5 teachers or 83,3% stated that they strongly agreed, one teacher or 16,7% agreed, and none of the teachers stated that they disagree or highly disagree with the percentage of 0%. For the average score of the component of teachers' needs on alternative learning model was 3,8 with the category of agreed with the teachers' needs on alternative learning model towards the development of creative thinking ability. (4) Teachers' interest on learning model that develops students creative thinking ability, from the analysis results it was revealed that 5 teachers or 83,3% stated that they strongly agreed, one teacher or 16,7% agreed, and none of the teachers stated that they disagree or highly disagree with the percentage of 0%. For the average score of the component of teachers' interest on learning model that develops students creative thinking ability was 3,8 with the category of agreed or the whole teachers were interested in learning model that develops students creative thinking ability. Table 2 shows the results of needs analysis on the development of creative thinking learning model (teachers).

Table 2. Analysis Results of Needs Analysis on the Development of Creative Thinking Learning Model (Teachers)

No.	Category	The Importance of the Development of Students' Creative Thinking Ability		Teachers' Needs on Learning Resources		Teachers Needs on Alternative Learning Model Alternative		Teachers' Interest on Learning Model that Develops Students' Creative Thinking Ability	
		Amount	%	Amount	%	Amount	%	Amount	%
1	STS	0	0 %	0	0 %	0	0 %	0	0 %
2	TS	0	0 %	0	0 %	0	0 %	0	0 %
3	S	2	57,7 %	3	50 %	1	16,7%	1	16,7%
4	SS	4	36,9 %	3	50 %	5	83,3%	5	83,3%
	Average score	**3,6**	**Agree**	**3,5**	**Agree**	**3,8**	**Agree**	**3,8**	**Agree**

Notes: STS (Strongly Disagree), S (Agree), TS (Disagree), SS (Strongly Agree)

Discussion

Some of the students' and teachers' weaknesses in creative thinking in the development of students; creative thinking ability are as follows (Damayanti & Sumardi, 2018; Fatah et al., 2016; Lince, 2016; Piaw, 2014): 1) in the learning process, the teachers only focus in final activity that is intelligence and learning achievement test that covers assignments that have to be done with correct answers, without giving learning that encourage the students during that process to be able to develop their creative thinking ability. It makes the students getting used to divergent thinking or only focus on one correct answer, meaning that there is only one answer and there is no other alternative answer. 2) At most of the time, teachers too often use multiple choice in test in every learning subject. Consequently, the students only focus on the correct answer and that do not train the students to develop their creative thinking ability. 3) The emphasize on learning approaches that are used by the teachers is on the students' behavior change from stimulus given by teachers. Most of the time, teachers use praises and punishment to change those students' behaviors. It makes the students become used to give only the correct answer to gain praises, and the other students are not courageous to answer because they are afraid of making mistakes and getting punishment. 4) The students do not really understand sentences as knowledge concept delivered by teachers, students are unable to differentiate the information accepted with the development of real life, they are less able to apply the knowledge and idea that they know, they are unable to use various ways and strategies in planning to problem solving, they are unable to draw conclusions or to bring it back to the problem being searched.

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4. CONCLUSION

From the needs analysis of the development of learning model in improving elementary school students' creative thinking ability it can be concluded that the needs on the development of students creative thinking ability in elementary school was still high, where in the life in the globalization era we are expected to be able to compete with creativity that we possess; the needs on learning resources for the students was still high. It shows that the students still need learning resources to develop their creative

thinking ability; the needs on alternative learning model that can develop creative thinking ability was also still high. It will be more meaningful if the learning model being developed gives space for the students fully to the development of their thinking ability; students' and teachers' interest in learning model that develops creative thinking skill was very high. It was due to the students' and teachers' awareness on the importance of creativity that can be implemented in daily life; a learning model that cab develop the elementary school students' creative thinking ability is required and proper to develop. Since the analysis results showed that learning model that can develop the elementary school students' creative thinking ability is needed or proper to develop, it is hoped that the teachers and the researcher develop that learning model with the hope that it can be implemented in schools.

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