



Synectic-Based Personal Analogy Learning to Improve Basic School Students 'Creative Thinking Ability

Mia Zultrianti Sari[✉], and Eli Hermawati

PGSD Universitas Kuningan, Kuningan, Indonesia

✉ mia.zultrianti.sari@uniku.ac.id; eli.hermawati@uniku.ac.id

Abstract. The problem in this study is about the low creative thinking skills of elementary school students which can be seen from the passive learning activities in the classroom. Besides, teachers who are more likely to focus on completing the material cause a lack of appreciation for students to develop creative thinking skills. This research was conducted based on the results of research, journals, books, and other relevant reference sources. Data collection in this study refers to the literature study method by conducting book review studies, literature, and other notes related to the topics discussed. From the literature that has been discussed, it can be concluded that Synectic has an important role in increasing creative thinking. However, in the field implementation, the use of the Synectic model itself certainly has obstacles that can affect the success of the learning process so that it will affect the desired results.

Keywords: Creative Thinking, Learning Model, Synectic Personal Analogy

How to Cite: Sari, M. Z., & Hermawati, E (2021). Synectic-Based Personal Analogy Learning to Improve Basic School Students 'Creative Thinking Ability. *The 3rd International Conference on Elementary Education*, 3(1), 294-301.

INTRODUCTION

The 21st century in this millennial era, it requires humans to keep abreast of the developments and changing times. Directly proportional to the changes that always occur in society, education is required to be able to balance these changes. This is reflected in the many policies that regulate education to provide space for Indonesian education people to continue to innovate and build education by the expectations of the national education system goals (Dewi, 2016).

The success rate of a nation's development can be seen from the empowerment of its human resources. Quality human resources are born from the educational process, from basic education to higher education. Education provides great opportunities for students to develop their talents, creativity, and ability to think optimally. Observers, education implementers, and researchers believe that every individual has the potential for creativity, and education has a responsibility in developing the creativity of students. (Ferrari, Cachia, & Punie, 2009; Moran, 2010).

The phenomenon that occurs in the field shows that there is an indication that the ability to think creatively is still low. This is indicated by one of which is that students cannot generate ideas (ideas), students cannot put forward various solutions or problem approaches.

Creative thinking is one of the highest levels for a person to think, which starts with recall, basic thinking, critical thinking, and creative thinking. Krulik and Rudnik in Saefudin (2012, p. 41). Osborn (Filsaime, 2007), Johnson (2007), and DePoter (2009) have the same view that by thinking creatively a person needs to be developed and trained as early as possible so that they can produce or develop something new, in the form of ideas, concepts, information or things. The ability to think creatively can be identified if this ability is reflected through one's behavior through creativity in problem-solving.

Creative thinking is a consistent thing from a thought process that is trained by paying attention to intuition, animating the imagination, expressing new possibilities, opening amazing viewpoints, and developing unexpected ideas (Johnson, 2007, p. 214). English (1993) states that the use of analogies has been suggested as a way



to strengthen the teaching of thinking skills in constructivist subjects (Muijs and Reynolds, 2008: 194). The use of the synectic method with analogy techniques in it will train students and open students' perspectives to imagine things that have never happened in the student's life.

METHOD

This research was conducted based on the results of research, journals, books, and other relevant reference sources. Data collection in this study refers to the literature study method by conducting book review studies, literature, and other notes related to the topics discussed (Nazir, 2013). Randolph in Astika (2009) states that Literature Study is an analysis and synthesis of information, which focuses on findings and not simple bibliographic quotations, summarizes the substance of the literature, and draws conclusions from the contents of the literature.

From the explanation above, it can be interpreted that the literature review is a series of processes of analysis and synthesis of various information related to the topic being discussed by the researcher, to obtain a stronger theory in a discovery or research process itself. The information obtained was collected from reference sources in the form of online and offline print media.

According to Mulyana (2013), several steps must be prepared in a literature study, namely as follows:

1. Preparation stage, consisting of determining the research theme to be studied, preparing the research design, and providing guidance to more experts if needed.
2. Implementation of research, consisting of collecting sources, criticism, interpretation, and writing of facts.
3. Research Report

Data collection in this study used literature study techniques, which were mostly taken from journals, books, papers, and other

relevant reference sources that supported the themes raised.

The right data analysis technique for literature studies is Content Analysis. Content analysis is research that is an in-depth discussion of the content of written or printed information in the mass media (Afifuddin and Saebani, 2009: 165). Researchers will select models and topics to be discussed, look for reference sources and link them to one another for in-depth synthesis and analysis

RESULTS AND DISCUSSION

Education is a process where students will experience a process of introducing various new things so that students have knowledge, information, and can develop thinking skills. Students' creative thinking skills need to be developed so that students can solve existing problems so that they can make informed decisions. right in a unique way. To develop students' thinking skills, a stimulus is needed during learning. Many factors affect students' thinking skills, one of which requires a variety of learning methods that facilitate learning, namely the use of Synectic learning methods Personal Analogy. Refer to the book Models of teaching by Bruce and Marsha on the future of Synectic methods in solving social problems. Citizens (members of the social system) are relationships (interactions between individuals or people by working together to solve problems to achieve certain goals.

Synectic Personal Analogy

The Synectic method has different characteristics from other methods, namely the existence of analogy and metaphor (figuratively). The analogy is a systematic comparison between two different objects or things but by showing the similarities in terms of functions of two things which are just as illustrations (Maryani Leni, 2013, p. 7). Synectic lead students to think about things that do not make sense, through metaphorical activities carried out during the lesson. Unreal things are imagined to be real, things that are not there are felt in them. The existing metaphors form a parable,



distinguish ideas or objects by changing the positions of the two, in other words, students' position on an object.

Synectic means a strategy of bringing together various elements, using figures of speech to obtain a new view. Furthermore, the Synectic Model is oriented towards improving problem-solving skills, creative expression, empathy, and insight in social relationships (Rustaman, 2007, p. 7). The more the relationship between an element, the more effective something is learned. This is very important in problem-solving activities, especially in problem identification and alternative solutions (Rahyubi, 2014, p. 90). In learning using the Synectic method, the teacher will direct students to a particular theme, so that students will seek information and knowledge related to a predetermined theme.

Problems require students to find solutions to solve them. Students must be sensitive to problems by being faced with situations that require problem-solving. Students should be given a stimulus and encouraged to recognize, formulate, and solve problems according to their abilities (Sumiati and Asra, 2009, p. 139). The Synectic learning method is used in learning as a way to stimulate and encourage students to be able to find solutions by looking for unusual ideas through creative thinking skills.

Even from the results of the Synectic itself, it will be not only the ability of creativity that will be facilitated to develop optimally but also the cognitive abilities of children (Rachmawati, 2010, p. 53). The knowledge that students get from the teacher in the classroom is in the form of material for students' constructs based on their imagination. Every human being can use their thoughts constructively to produce something new (Johnson, 2007: 213). This Synectic method itself is in line with constructivist learning theory, which directs students to find concepts and get ideas from what students get outside or inside the classroom.

Each student will have different creative thoughts according to their experience, science, and life in their environment. However, whatever the results of children's thoughts, it will help them be more creative in finding new and different thoughts. Creative thinkers deliberately exercise their imaginations, in part by looking at things from an unusual perspective than usual (Johnson, 2007, p. 218).

William Bill Gordon in Joyce (2009) introduces a Synectic model in primary and secondary education that is adapted by the industrial world. Synectic is designed to help people with parts of problem-solving and writing activities and gain new perspectives on topics from various fields (Rustaman, 2007, p. 7). In the classroom, the Synectic model is introduced to students in a series of works. Can be applied individually or in groups. Synectic strategies using metaphoric activities are designed to provide the structure through the free development of their imaginations into everyday activities.

One of the metaphors in Synectic is the personal analogy. In introducing personal analogies, it is necessary to emphasize the idea or object to be compared, students must feel that they have become part of the problem. The emphasis in the personal analogy is on empathic engagement (direct feeling). In other words, personal analogy requires detachment as one way of living another object. The greater the distance between detachment, the more creativity will be. There are four stages of individual involvement, namely:

1. The first person describes with facts.
2. The first person identifies with feeling.
3. Empathic identification with living things.
4. Identification with inanimate objects

The purpose of the above stages is to see how much conceptual distance is in establishing good concepts. Gordon in Joyce believes that the benefits of analogy can create distance. The greater the distance the more it allows students to get new ideas. Examples of personal analysis include: If I were a cop, I would be hurt if someone broke traffic. Another example, for example: If I were to



pay a hundred thousand dollars, I would be very happy to be put in a mosque charity box instead of buying expensive junk food at the mall.

Creative Thinking

Creative thinking is a way of thinking that is filled with ideas or ideas in developing imagination. The nature of the subject of creative thinking which emphasizes what, how, to what extent something should be learned, or how something should be learned. Creative thinking is the ability to utilize the potential that is owned by the thinker (Woolverdan Scott, 1987, p. 293). This relates to the Synectic learning method which is part of a family of information processing learning models, where students must be able to think creatively based on knowledge and information that has been obtained from class or outside the classroom.

Three kinds of thinking skills need to be mastered by individuals, as suggested by Sternberg (2000), the three skills are: 1) Critical thinking skills, including analyzing, criticizing, deciding, evaluating, comparing, and estimating; 2) Creative thinking skills, including creating, discovering, imagining, practicing, and hypotheses; 3) Practical thinking skills, are involved when intelligence is needed in the context of the real world and depends on stored knowledge, but not learning outcomes (Kuswana, 2012, p. 165). Students are expected to create and find creative ideas based on previous knowledge and experience, both in practice in the environment or theory in the classroom. From the knowledge obtained from the teacher and information obtained in the community, students will find it easier to construct their thoughts.

Creative thinking is a habit of the mind that is trained by paying attention to intuition,

animating the imagination, expressing new possibilities, opening amazing viewpoints, and developing unexpected ideas (Johnson, 2007, p. 214). English (1993) reveals that the use of analogies has been suggested as a way to strengthen the teaching of thinking skills in constructivist subjects (Muijs and Reynolds, 2008, p. 194). The use of the Synectic method with analogy techniques in it will train students and open students' perspectives to imagine things that have never happened in the student's life.

Intuition is the emotional remnant of an old experience that has long been forgotten (Johnson, 2007, p. 218). The creative thinking stage needs to be developed and trained from an early age because the development of children towards adolescence to adulthood is a continuous process. Creativity is a superficial beauty, on the other hand, its authentic form is the process of bringing something new into existence (May, 2004). The creative process is as follows:

1. The first thing to pay attention to in creative action is that creative action is an encounter because in that case, the quality of involvement occurs.
2. The next thing in the pattern of creativity in interpretation that can produce new ones

Meanwhile, according to Jordan (2002), creativity is when the mind is suddenly hit by flashes of words, or music, or images that give rise to a piece of poetry, song, painting, and the discovery of various other works of beauty.

The creativity test according to Torrance (Jordan 2002) there are four main creative skills related to divergent thinking, which can be seen in Table 1 below, among others.

Table 1 Torrance Creative Thinking Components and Indicators

No	Components of Creativity	Creative Thinking Indicators
1	Fluency	a. The ability to come up with various ideas. b. The number of emergent ideas as a whole.



2	Flexibility	The ability to generate ideas in several categories.
3	Originality	a. The ability to come up with unique ideas.
		b. The ability to come up with strange ideas.
4	Elaboration	c. The ability to come up with ideas that are not commonly used / new
		a. Ability to add details to ideas.
		b. Expanding the usefulness of something that is intended.
		c. The additions and changes in shape that are made have added value.

Fluency or expertise is the ability to be able to generate many ideas. Flexibility is the ability to present various solutions or approaches to problems. Originality is the ability to generate ideas in ways that are not cliché original. Development is the ability to review a problem based on a different perspective from what many people already know.

In another case according to DePorter (2009) creativity in solving problems or ideas for something that requires a solution appears in five stages. The stages are as follows:

1. Preparation Stage

In the preparatory stage, the brain collects information and data that serves as a basis or research for the creative work that is taking place.

2. Incubation Stage

The incubation period is known as the rest period for storing the collected information. During this seemingly unproductive time, the subconscious mind takes over the seeding information in a way that is contained in the word incubation in another sense the mind will digest the facts and process them.

3. Illumination Stage

The stage of enlightenment is often widely known as the eureka stage of the brilliant stage, which is the moment of inspiration when a new idea comes to mind as if from nothing, to answer the creative challenges at hand.

4. Verification Stage

Determining whether the solution really solves the problem or will only complicate the existing problem.

5. Application Stage

Take concrete steps that will be taken to follow up on solutions that have been previously thought of.

Based on the above understanding, it can be concluded that creativity is the ability of a person to produce something in the form of an idea or a work whether it is something new or not that is formed in concepts, understanding, inventions, and works of art. Creative thinking skills often called divergent thinking skills, namely thinking skills that can produce varied and different answers from those that have been there before. Osborn (Filsaime, 2007) defines that creative thinking is a problem-solving process that produces creative solutions to existing problems. Helping students develop creative thinking skills that can guide them to adapt to their living conditions will be very useful for their lives (Sapriya, 2014: 85). The teacher in the class acts as a facilitator and helps the child by choosing methods that can stimulate students' creative thinking.

Synectic and Creative Thinking Skills of Students

Below are some of the results from research and literature studies that explain the effect of the Synectic model on the creativity of students. According to Agusti, Julia, and Subarjah, (2017) the Synectic model can improve the creative abilities of third-grade elementary school children in the material of imaginative drawing of the natural surroundings. This can be seen from the 1st hypothesis test using the t-sample bound test, the p-value (sig-2 tailed) = 0.000, which means that there is a significant increase in students in the experimental class. The improvement in the experimental class cannot be separated from the Synectic



treatments and procedures that have been applied in learning. Although in the second hypothesis test using the Wilcoxon test, the p-value (sig-2 tailed) = 0.000 which means that there is the same significant increase in students in the control class. So this affects the final results of the different tests in the 3rd hypothesis, namely the n-Gain average difference test using the Mann-Whitney test or the U-test, the P-value (Sig-1tailed) = 0.206 which means Synectic is not better than the comparison method used in the control class. Many things affect the success of increasing creative abilities, not only the learning methods used.

In another literature, (Mutmainah and Aquami, 2016) use Synectics to increase learning creativity in science subjects in grade V at Madrasah Ibtidaiyah. The use of Synectic learning models can increase student learning creativity in science subjects, this can be seen from the hypothesis testing using the t-test, namely, the calculation ($T_o = 9.97$) and t listed in the t value table ($T_t 5\% = 2.00$ and $t_t 1\% = 2.65$) it can be seen that t_o is greater than t_t , which is $2.00 < 9.97 > 2.65$. Another reinforcing data is the mean acquisition of learning creativity in the experimental class of 87.24, while the mean in the control class is 73.93.

Synectic Learning Model is also effective in increasing the ability to think creatively in elementary school students as in experimental research conducted by (Islamiah, 2017). This can be seen from the acquisition of pretest scores in the experimental class, namely 41.60 with the highest score of 60 and the lowest score of 10, but after being treated with a Synectic learning model in science subjects, the students' average score was 70.80 with the highest score of 90 and the lowest score is 50. The results of the observation of students' creative thinking abilities obtained that the frequency of the experimental class was higher than the control class. In the experimental class, the criteria are very high = 6 students or 24%. High = 13 students or 52%, Medium = 5 Shiva or 20%, and low = 1 student or 4%. Whereas in the control class the criteria are very high = No students or 0%, High = 9 students or 36%, Medium = 13

students or 53% and Low 3 students or 12%. This shows that the increase in science learning outcomes increases after using the Synectic learning model.

Synectic can not only be applied in lessons that are exact but can also be developed in exploring creativity in language as well as literature obtained from (Ramandhani, 2017) using the Synectic learning model to improve elementary school students' poetry writing skills. The results of data analysis from the study showed that the average score of students who received learning with the Synectic model was 37.433, while the average score of students with the comparison method was 31.37. This difference in average scores proves that the Synectic learning model has a higher influence on students' writing skills.

Synectic excellence is not only interesting to be applied in elementary schools, but also more broadly it can be used to develop creative abilities at a higher level among students. As was done by (Noor Muhammad and Ristiyani, 2019). The Synectic model is applied in short story writing to improve writing skills and is observed through classroom action research. The results showed an increase in each cycle. This can be seen from the pre-action average score of 50.6 in the poor category. In the first cycle, the average was 60.42. In the second cycle, the average value rose to 80.18 with a good category. In addition to improving the quality of learning, student behavior in learning to write short stories is also getting better.

Judging from the literature previously discussed, it can be concluded that Synectic has an important role in increasing creative thinking. However, in the field implementation, the use of the Synectic model itself certainly has obstacles that can affect the success of the learning process so that it will affect the desired results

CONCLUSION

Synectic has an important role in increasing creative thinking. However, in the field implementation, the use of the Synectic model itself certainly has obstacles that can



affect the success of the learning process so that it will affect the desired results.

REFERENCES

Ahsin N. Muhammad, Ristiyani. (2019). Penerapan Model Sinektik Untuk Meningkatkan Kemampuan Menulis Cerpen Bagi Mahasiswa. *Jurnal Kredo*. 3(1).

Agustin, Devi. Julia. Subarjah, Herman. (2017). Pengaruh Model Pembelajaran Sinektik Terhadap Kreativitas Siswa Pada Materi Menggambar Imajinatif Mengenai Alam Sekitar. *Jurnal Pena Ilmiah*: 2(1)

Aisyah, Siti. Dkk. (2008). *Perkembangan dan Konsep Dasar Pengembangan Anak Usia Dini*. Jakarta: Universitas Terbuka.

Arifin, Zainal. (2009). *Evaluasi Pembelajaran*. Bandung: PT Remaja Rosdakarya.

Arikunto, Suharsimi. (2013). *Prosedur Penelitian Suatu Pendekatan Praktek*. Jakarta: PT Rineka Cipta

Badriah, Laelatul, Dewi. (2012). *Metodologi Penelitian*. Bandung: Multazam.

BNSP. (2006). *Panduan penyusunan kurikulum tingkat satuan pendidikan jenjang pendidikan dasar dan menengah*. Jakarta: BNSP.

Depdiknas. *Undang-undang Republik Indonesia No 20 Tahun 2003 tentang Sistem Pendidikan Nasional*. Jakarta: Depdiknas.

Dewi, ratna. (2016). Kebijakan pendidikan ditinjau dari segi hukum kebijakan publik. *Jurnal ilmu hokum*. 7(2).

Gunarsa, Singgih D. (2002). *Dasar dan Teori Perkembangan Anak*. Jakrata: Libri.

Hanggara, Agie dan Darsih, Endang. *Dasar Statistika (Manual dan SPSS)*. Bandung: Mujahid Press.

Haryati, Sri. (2012). *Research and Development (R&D) Sebagai Salah Satu*

Model Penelitian Dalam Bidang Pendidikan. 37(1).

Islamiyah, Nurul. (2017). *Efektivitas Model Pembelajaran Synectic Dalam Peningkatan Hasil Belajar IPA dan Kemampuan Berpikir Kreatif*. Tesis, Pasca Sarjana, Pendidikan Guru Madrasah Ibtidaiyah, UIN Maulana Malik Ibrahim, Malang.

Jajuli, Akhmad. (2009). *Berpikir Kreatif Dalam Kemampuan Komunikasi Matematika*. ISBN: 978-979-16353-3-2.

Johnson, Elaine B. (2007). *Contextual Teaching & Learning*. Bandung: Mizan Learning Centre.

Jordan, E Ayan. (2002). *Bengkel Kreativitas*. Bandung: Kaifa.

Joyce, Bruce et. al. (2009). *Models of Teaching (Model-model Pengajaran)*. Yogyakarta: Pustaka Pelajar.

Kuswana, Sunaryo Wowo. (2012). *Taksonomi Kognitif Perkembangan Ragam Berpikir Kreatif*. Bandung: Rosda.

Komariah, A. Dan S. D. (2017). *Metode Penelitian Kualitatif*. Bandung: Alfabeta

Lamoma. (2015). Pengembangan Instrumen Kemampuan Berpikir Kreatif Matematis Untuk Siswa SMP. ISSN 2089-855X. 4(1).

Lestari, Uji. (2015). Pengembangan Bahan Ajar Menulis Cerpen Berbasis Proyek Dengan Pendekatan Kontekstual Untuk Meningkatkan Kemampuan Siswa Menulis Cerpen. *Metafora*. 2(1).

Maryani, Enok. (2011). *Pengembangan Program Pembelajaran IPS untuk Peningkatan Keterampilan Sosial*. Bandung: Alfabeta.

Maryani, Leni. (2013). *Pengaruh Penerapan Metode Pembelajaran Sinektik Dengan Teknik Analogi Personal Terhadap Kemampuan Mengembangkan Perilaku*



- Kreatif Siswa Melalui Pembelajaran IPS*. Tesis SPs UPI Bandung: Tidak diterbitkan.
- May, Rollo. (2004). *The Courage to Create (Apakah Anda Cukup Berani Untuk Kreatif)*. Jakarta: Taraju.
- Miftah, M. 2013. Pengembangan Karakter Anak Melalui Pembelajaran Ilmu Sosial. *Jurnal Pendidikan Karakter*, 31(2)
- Munandar, Utami. (2009). *Pengembangan Kreativitas Anak Berbakat*. Jakarta: Rineka Cipta.
- Mutmainah, Umami. Aquami. (2016). Penerapan Model Sinektik (*Synectics*) Terhadap Kreativitas Belajar Siswa pada Mata Pelajaran Ilmu Pengetahuan Alam Kelas V di Madrasah Ibtidaiyah Hijriyah II Palembang. *Jurnal Ilmiah PGMI*. 2(1).
- NCSS National Council for the Social Studies (1994). *Curriculum Standards for Social Studies*. Washington DC. The United States of America.
- Numan, Somantri Muhammad. (2001). *Menggagas Pembaharuan Pendidikan IPS*. Bandung: Remaja Rosdakarya
- Nyemas, Desi Rosmita. (2014). Meningkatkan Aktivitas Siswa Melalui Model Sinektik pada Pelajaran IPS Kelas VII SMP 2 Sungairaya. *Jurnal Pendidikan dan Pembelajaran Khatulistiwa*, 3(2).
- Poedjiadi, Anna. (2005). *Sains Teknologi Masyarakat*. Bandung: Remaja Rosdakarya.
- Rachmawati, Yeni. (2010). *Strategi Pengembangan Kreativitas Pada Anak Usia TK*. Kencana: Jakarta.
- Rahyubi, Heri. (2014). *Teori-teori belajar dan aplikasi pembelajaran motorik*. Bandung: Nusamedia.
- Ramadhani, Sri. (2017). Pengaruh Model Pembelajaran Sinektik Dan Penguasaan Kosakata Terhadap Keterampilan Menulis Puisi Siswa Kelas V SDN 066041 Medan. *Jurnal Tematik*. 6(4).
- Rustaman, Nuryani Y. (2007). *Pengembangan Model Pembelajaran MIPA*. Fakultas MIPA UPI, Bandung.
- Saefudin, Abdul Aziz. (2012). Pengembangan Kemampuan Berpikir Kreatif Siswa Dalam Pembelajaran Matematika Dengan Pendekatan Pendidikan Matematika Realistik Indonesia (PMRI). *Al-Bidayah*, 4(1)
- Sapriya. (2014). *Pendidikan IPS Konsep dan Pembelajaran*. Bandung: Remaja Rosdakarya.
- Sumiati, Asra. (2009). *Metode Pembelajaran*. Bandung: Wacana Prima
- Sugiyono. (2011). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sugiyono. (2013). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R&D)*. Bandung: CV Alfabeta.
- Sugiyono. (2015). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R&D)*. Bandung: CV Alfabeta.
- Sukardjo. (2006). *Evaluasi pembelajaran. Diktat mata kuliah evaluasi*.
- Supriyadi. (2014). Peningkatan Kemampuan Menulis Puisi Dengan Model Sinektik. *Jurnal Pemikiran dan Pengembangan SD*, 1(3), 201-211
- Syah, Muhibbin. (2004). *Psikologi Pendidikan dengan Pendekatan Baru*. Bandung: Remaja Rosdakarya.
- Syamsidar. (2015). Dampak social budaya terhadap pendidikan. *Jurnal Bimbingan Penyuluhan Islam*. 2(1).
- Woolover & Scott. (1987). *Active Learning in Social Studies Promoting Cognitive and Social Growth*. London: Scott, Foresman, and Company.