

Strengthening Critical Thinking Skills Through The Creative Problem Solving Model at SD Penggerak Era Merdeka Belajar

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Abstract. The independent learning curriculum is a manifestation of a policy designed as a form of improving the quality of education in Indonesia in order to be able to produce superior students as an effort to face a future with complex challenges. Where this curriculum emphasizes freedom of thought for students and teachers. One of the goals of this study is to assess students' critical thinking and problem-solving abilities before fostering their creativity. This study employs the creative problem-solving technique with a sample of 25 pupils from SD N Sondakan II Surakarta's fifth grade students and class teachers. This qualitative approach uses the application of case studies as a method. technique, which involves gathering data through observation, questions, interviews, and documentation. According to the study's findings, each student can think critically about what they are learning when the teacher asks questions based on the HOTS. This study demonstrates that the arrangement of the subject matter or discussion topics in the teacher's assignment is an attempt to encourage students' innovative problem-solving thinking patterns.

Keywords. Creative Problem Solving Model, Critical Thinking, Era of Independent Learning, HOTS

INTRODUCTION

The expansion of man's understanding of the world as a whole and his ability to think more clearly and strategically as a result of advances in knowledge and technology. This method of thinking is a direct reflection of the available human resources. Education professionals are developed through both formal and informal education. Teaching intellectual skills, emotional management skills, and spiritual stability skills are all manifestations of education. These are the three things that make up education on a global scale. In the period of the Industrial Revolution 4.0, it is anticipated that Indonesia's educational system will generate graduates with the capacity to think critically, solve problems, think creatively and innovatively, and have communication and teamwork abilities. Aside from that, knowledge of how to use technology and information, as well as how to find, manage, and communicate information, is also necessary (Risianto, 2019). A learning system with a dynamic process that emphasizes and focuses on efforts to arouse students' curiosity about the world is what we mean when we talk about education (Ihsan, 2010).

Implementation of the independent learning curriculum is a manifestation of policies designed by the government as a means of improving the quality of education in order to produce outstanding students and graduates who are ready to face difficult problems in the future (Syafaruddin, Asrul, 2012). The autonomous learning curriculum places a strong emphasis on critical thinking abilities for both teachers and students. Students and teachers should be encouraged to build autonomous soul personalities so that they can freely explore and make use of the skills and knowledge that are present in their surroundings. This will help create the character of an independent spirit. The use of independent learning has the learning qualities that can encourage students to

reach their full potential, cultivate a caring attitude toward the environment so that self-confidence and academic ability emerge, as well as the ability to adapt to the surrounding social context (D.K, 2020).

The importance of a curriculum is the foundation of the main axis in the educational process. So that every period there are changes in the curriculum for education to run straight with the demands of the times and improve the quality of education in Indonesia. New ideas and approaches to conducting the teaching and learning process are developed as a result of the advancement of technology science. This may result in adjustments to the driving force and the emergence of curricular implementation in terms of content and approach. According to (Nasution, 2009), curriculum change is a tool to achieve the means so that the objectives can be implemented. Changing the curriculum also means changing people, which is involved in the scope of the school itself including teachers, education coaches, and each of them who also participate in nurturing in education. Due to the fact that a societal shift is one of the underlying presumptions of curriculum revisions, this is the case. Curriculum renewal or even innovation are terms that are occasionally used to describe changing the curriculum.

In this era of autonomous learning curricula that are rife with competitiveness, critical thinking abilities are necessary. Few educational institutions promote critical thinking in their students. Instead of urging students to comprehend novel concepts or reevaluate previously reached conclusions, schools actually encourage students to provide appropriate responses to questions Jacqueline and Brooks in (A, 2012) as the development and creation of students' critical thinking, teachers must also have this ability. Critical thinking abilities are therefore crucial for everyone to possess, including teachers and pupils. The capacity for critical thought is regarded as one of the higher order thinking skills. Children that are capable of mathematical critical thinking will be better equipped to make good decisions and choose diverse versions of themselves as adults (T, 2014).

The Creative Problem Solving (CPS) learning model is one of many that can involve students in the learning process; there are other learning models that can achieve this as well. The definition of the Creative Problem Solving learning model is one that promotes the development of critical thinking abilities and the use of diverse techniques when faced with a difficulty, according to the description of this opinion. (Aris, 2014) wrote down the steps of Creative Problem Solving, namely problem clarification, expression of opinions, evaluation and selection, and implementation. The CPS model is an educational approach that prioritizes the development of skills while thinking critically and being able to solve problems before moving on to encouraging the strengthening of creativity. And has the following steps, namely "The four phases will be: 1) clarification of the problem, 2) brainstorming, 3) evaluation and selection, 4) implementation." (Pepkin, 2004).

METHODS

This study used a qualitative descriptive methodology, summarizing, describing, and analyzing the research's findings. The case study qualitative approach is used in this research design. According to (Creswell, 2010) study using qualitative methods is study whose conclusions and outcomes cannot be reached by statistics or other quantified approaches, such as other quantified methods. In grade 5 at SD N Sondakan II, the independent curriculum teaches creative problem-solving models in order to improve students' critical thinking skills. Digging data, analyzing it, and describing the learning process are processes of qualitative methodologies. (Rangkuti, 2014) The act of searching and collecting interview transcripts is methodically known as data analysis, field notes and other accumulated material as a development on research efforts and about what they achieve. It is data from the field to improve the researcher's understanding of what was studied.

This research technique uses observation, questionnaires, interviews, and documentation. qualitative data analysis techniques in the process have the following arrangements and steps: (1) Documentation and observation are used to gather data. (2) Data condensation, which results in selective research on significant dimensions and relationships to obtain information, focuses on the formulation of problems. (3) Data evaluation, which involves evaluating the quality and adequacy of data. (4) Data simplification into a broader pattern. (3) Data presentation: To make it easier for readers, data is presented in an orderly and tidy manner. (4) Confirming the conclusions reached by the author or researcher (Saldaña, Johnny dan Omasta, 2017). The researcher's efforts in obtaining information from the fifth grade teacher at SD N Sondakan II made several questions to ask, to be submitted in digging up information from interviews. To classify the level of critical thinking in students who are led by this creative problem-solving paradigm, a questionnaire instrument in the form of HOTS-based question activities is used in the IPAS course on the topic of electric power. The state of the class and how the teaching and learning process is carried out are directly observed by researchers in the independent curriculum. At SD Penggerak, namely at SD N Sondakan II. In addition, researchers use a documentation approach by first requesting certain data associated with the instrument which later this data will be analyzed by researchers. The statistics offered along with the topics being discussed were supplemented and expanded upon by researchers by looking at additional materials, including past research studies.

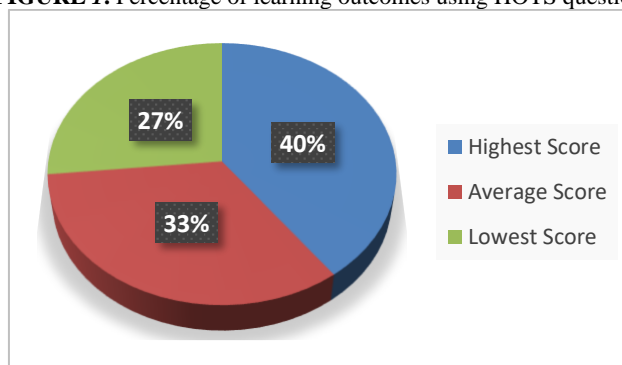
RESULT AND DISCUSSION

From a survey that researchers using descriptive qualitative methodology did. The researcher observed fifth-graders at SD N Sondakan 11 Surakarta as they learned in the classroom to gather the traits of critical thinking in those children. Samples from the factors of student effectiveness and mastery of the learning materials with the Creative Problem Solving were collected by researchers. Work on HOTS-based inquiry exercises as proof of modeling in the classroom and learning results. If the learning objectives are met, new experiences are presented, and student accomplishment competencies are made more competitive, the teaching and learning process can become more effective (Fathurrahman, A., Sumardi, S., Yusuf, A. E., & Harijanto, 2019). Based on table 1.1 from the results of observations and observations, it is found that students are able to formulate problems appropriately, are able to provide arguments in the form of opinions, suggestions and ideas with confidence, students are able to master learning methods and materials systematically, students are able to solve problems but less precise, students are able to provide appropriate problem solving taken from class learning activities when delivering IPAS subject matter on Electrical Energy. As a result of the prerequisites being met, it can be said that the monitored schools have shown that fifth-graders have the capacity for critical thought, supporting the conclusion that learning objectives can be met and the process of implementing learning is effective. To assess one's capacity for critical thought, a variety of factors might be taken into consideration. Ennis in (Agustina 2012) according to some of these aspects can be classified into several indicators of critical thinking seen from the table below:

TABLE 1. Indicators and implementation of critical thinking implementation

Number.	Indicators of Critical Thinking Ability	Description	Implementation
1	Formulate the problem	Formulate problems and provide direction to obtain answers	Students are able to formulate the problem appropriately
2	Providing an argument	Providing arguments with suggestions	Students are able to give arguments in the form of opinions, suggestions and express ideas with confidence.
3	Doing deduction	Provides a clear understanding of specific and general matters	Students are able to master learning methods and materials systematically
4	Performing induction	Draw conclusions related to the problem	Students are able to solve problems but less precise
5	Conduct evaluation	Conducting an evaluation in the presence of facts	Students are able to provide appropriate problem solving
6	Deciding and implementing	Deciding on various problem-solving strategies that will be planned for and implemented	Students are able to determine alternative solutions to problems reflectively in solving problems objectively

FIGURE 1. Percentage of learning outcomes using HOTS questions



In 25 students, to be precise, is the number of samples in class V bunch B SD N Sondakan 11 Surakarta which consists of 40% percentage of children who get more than average scores and 27% of children who get below average scores and 33% of children who get average scores [View Figure 2]. So that it is possible to determine, via the application of innovative problem-solving models and independent learning curricula, that students are proficient enough in their understanding of the learning materials. It is evident from the income of values above the median, or 40%, which is equal to half of the average student. Some of the findings from study by (Ciptaningtyas, 2016) show that the creative problem solving (CPS) learning model is applied successfully and can result in learning activities that are successful. According to the findings of the student effectiveness factor in the classroom, the use of the creative problem solving model and the completion of the provided HOTS issue exercises would help students start to develop their problem-solving abilities. So as to produce a fairly good score on the exercise questions by the student. Not only that, research (Oktaviani & Nugroho, 2015) proved that the creative problem solving (CPS) learning model can provide the ability to communicate skills and also to improve concept understanding.

Linkage of HOTS problem exercises in the creative problem solving model to improve students' critical thinking skills

In addition to its function as a decision maker, thinking also has the meaning of using the mind that is applied in an effort to consider and in making decisions, weighing - weighing to obtain the results of thought (Sunaryo Kuswana, 2014). Which means that when humans use their minds, the individual will also perform an action called thinking, both considering and making a decision. (Rifaatul Mahmuzah, 2015) To put it another way, critical thinking helps people focus their thoughts so they can decide what to believe and how to behave. Students need to improve their critical thinking abilities as they advance through the learning process in addition to deepening their comprehension of the subject matter. In elementary school students who are children in the age range of 7 years to 11 years. In line with Piaget's opinion (in Susanto 2013) said that elementary school students are someone who is in the concrete operational stage (7-11 years). The youngster is also starting to go through puberty at this stage, when he will start to fully develop formal thought processes. They easily and frequently exhibit intense curiosity and interest in the world around them, find complete fulfillment, enjoy organizing themselves to solve issues, and are more inclined to be competitive (competition).

Therefore, it is crucial for primary school kids to have thinking abilities so that learning will be implemented in a way that is more meaningful and consistent with learning objectives. Explanation by (Novak in Tawil 2013) as for basic thinking is a thinking activity that is an outline of a rational thought process, which consists of a number of phases with a level of difficulty starting with something basic and something complex. Rational thinking activities include "memorizing, imagining, grouping, generalizing, comparing, evaluating, analyzing, synthesizing, deducing, and concluding". The first of these divisions is problem solving, decision making, and reasoning. Complex cognition, often known as higher-order thinking, can be divided into four areas. Problem-solving, judgment, critical analysis, and creative analysis (Amri, 2010).

Engaging in tasks that demand for critical thinking is one example of high-level thinking, which is the capacity to reason logically and plainly. By exercising critical thinking, students can identify a solution or the best response to the issue at hand (Sihotang, 2010). From this statement, if there is a student who tries to find out a difficulty he is facing and tries to solve it and then weighs the good and bad then he can be called a student who has critical thinking skills. In line with the above statement, Billy Tunas To improve one's communication and problem-solving abilities, one must cultivate the critical thinking abilities that form the foundation of these qualities within

oneself. A critical thinker must carefully assess their own and other people's ways of thinking in order to have a thorough and clear knowledge of a subject (Johnson, 2010).

Being able to think clearly, freely, and factually is a crucial component of being a critical thinker, which is one aspect of having a critical mindset. A true thinker is able to explain the reasoning behind not only his own findings but also to accept the viewpoints and defenses of others by carefully considering their arguments (Harsanto, 2005). If a student can solve high-level statements that require high-level skills (HOTS), it can also be said that he has strong critical thinking skills that involve high-level skills (HOTS) in the solution process. (W. Conklin & J. Manfro, 2012) stated the characteristics of high-level critical thinking, namely "characteristics of higher order thinking skills encompass both critical thinking and creative thinking". There are two characteristics that underlie higher order thinking skills, namely critical and creative thinking. Encouraging centered learning with teachers who only serve as facilitators, improving students' creative thinking skills so that they can plan how to solve problems, and including students actively in the process of finding out how to solve problems themselves (Suhardjono and Supard Arikunto, 2012).

In light of the explanation provided above, critical thinking may undoubtedly be utilized to aid students, particularly those in grade V, in developing their conceptual understanding of IPAS (Natural and Social Sciences) curriculum. It is inspired by research showing that critical thinking is important for intellectual, social, moral, cognitive, and individual scientific development. It takes a lot of talent to be critical (Hashemi, SA, Naderi, E, Shariatmadari, A, Naraghi, MS, and Mehrabi, 2010). Learning, and in particular learning science, should start early and continue throughout life, with the aim of developing critical thinking skills. If educators teach their students to think critically by identifying, analyzing, and being able to solve their problems in the right way, then the accumulation of new knowledge will have a greater impact on people's lives (dixon in Alghafri, S., Ali, & Nizam 2014). This is in line with what is expressed by (Ahmad, 2013) "critical thinking is a concept that is given or a problem that is presented" therefore students will be able to think critically and deeply about problems and something that is at the stage of experience in others because of this critical thinking.

It is considered that a person has acquired higher-order thinking skills if they can analyze, evaluate and create on their own. This indicates that they have achieved an understanding of the content and higher level thought processes. (Sani, 2019) A person with excellent aptitude will be able to use new knowledge or information in an effort to find answers or solutions that may be able to overcome new problems. The level of thinking is when above memory (recall) is called reasoning (reasoning) (Saefudin, 2012). Higher order thinking, also known as High Order Thinking Skill (HOTS), is thinking that is above the level of basic thinking. Higher order thinking skills are difficult to integrate in the classroom, thus major effort must be done to make it happen. Instructors are in charge of supervising and encouraging pupils to constantly think critically. Thus, learning strategies are transformed into learning ideas that enable instructors to relate their courses to the experiences of their students in the real world and encourage them to find solutions to their own problems. In learning, educators have an important role in encouraging students to solve problems, as well as in playing a role in activating classroom learning. Therefore, in the observations made, there are results of analyzing some of the implementation values of the implementation of high-level critical thinking indicators during learning as in the following table :

TABLE 2. Critical Thinking Implementation Score

Indicator	Implementation
Conceptual	<ul style="list-style-type: none"> - Able to identify problems - Can create structured questions - Can explore differences and similarities
Reflexive	<ul style="list-style-type: none"> - Can select relevant information - Have an interest in reading - Able to understand fact & opinion
Open-minded	<ul style="list-style-type: none"> - Sociable - Ask often - Likes to discuss - Creative thinking

Rational	<ul style="list-style-type: none"> - Able to be a leader - Able to work together - No fear of being wrong - Has high concentration
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School learning will be very meaningful if critical thinking skills have begun to be developed through the learning process (Affandy, H., Aminah, N. S., & Supriyanto, 2019). Active instruction helps students develop some components of their critical thinking abilities with reference to what they see, hear, and do (Handayani, S. L., & Dewanti, 2020). Based on the table above, it means that the implementation of critical thinking implementation of grade V students is very diverse with a total of 25 students. In this case, the ability to think critically has an indicator which the indicator itself is useful for providing a simple explanation which is divided into sub-sub indicators, namely with four predetermined indicators including conceptual, reflective, open-minded, rational (Lestari Handayani, Sri., Lis Giri Budiarti., Kusmajid., 2021). From these indicators, the results show that in its implementation, children have a very varied implementation, as for the conceptual implementation, the results below are obtained:

TABLE 2. Implementation of Conceptual attitude implementation
Conceptual

Number	Implementation	Percentage
1	Able to identify problems	78,3 %
2	Can create structured questions	30,5 %
3	Can explore similarities and differences	20,2 %

The results of the percentage of conceptual attitudes above show that fifth grade students implement three critical thinking indicators in class: being able to identify problems, which is attained by 78.3% of the class as a whole, being able to formulate structured questions, which is attained by 30.5% of the class, and being able to examine existing similarities and differences, which is attained by 20.2% of the class. such that problems can be identified by the application of frequently applied conceptual attitudes. The attitude of being able to investigate the similarities and contrasts that exist in a problem when the teacher provides it during learning is the lowest when learning is implemented in the classroom. In accordance with this, critical thinking is the capacity a person possesses to make judgments based on his or her views and level of confidence, and to examine and solve difficulties that arise (Walfajri, R. U., & Harjono, 2019). . In this 21st century era, it also gives demands to humans to be able to have critical thinking skills, the ability to communicate, create, and work together or collaborate (Affandy, H., Aminah, N. S., & Supriyanto, 2019; Makhrus, M., Harjono, A., 2018; Septikasari, R., & Frasandy, 2018; Zubaidah, 2016).

TABLE 3. Implementation of Reflective attitude implementation
Reflective

Number	Implementation	Percentage
1	Can select relevant information	72,2%
2	Possess a reading preference	85,0%
3	Able to understand fact & opinion	70,2%

From the results of the reflective attitude presentation above, it was found that fifth grade students implemented critical thinking indicators in class with three activities, namely being able to select relevant information 72.2% of the total students in the class, having an interest in reading 85.0% and being able to understand facts and opinions 70.2%. So that it can be obtained that the implementation of a reflective attitude that is often implemented is having an interest in reading 85.0%, the lowest is being able to understand facts and opinions. Critical thinking is directly a way of thinking that is reflective in depth to be able to solve problems and in decision making (Stobaugh, 2013). Students that are able to think critically engage in an intellectual process that begins with conceptualizing, applying, synthesizing, and evaluating knowledge or data from diverse sources

(Lilis Lismaya, 2019). In the intellectual process itself, of course, students will achieve their critical thinking skills if they are learned and practiced (De Bono, 2007).

TABLE 4. Implementation of Open Mindedness
Open-minded

Number	Implementation	Percentage
1	Sociable	88,2%
2	Frequently ask	70,2%
3	Open to discuss	82,0%
4	Creative thinking	78,8%

From the results of the percentage of open-mindedness above, it is found that fifth grade students implement critical thinking indicators in the classroom with four implementations, namely outgoing in socializing obtained results of 88.2% of the total students in the class, frequently asking questions by 70.2% of the total students in the class, like to discuss by 82.0% of the total students in the class, and creative thinking by 78.8%. The notion of open-mindedness is therefore frequently applied in socializing, where it is implemented at a rate of 88.2%, and in asking questions, where it is frequently adopted at a rate of 70.2%. From the aforementioned exercises, it is obvious that students are constantly trained in habituation in the affective domain, specifically in their attitudes and sentiments. In the teaching process, students always look for various ways to encourage understanding of problems, improve students' creative thinking skills in finding and solving student-centered problems and the teacher is only a facilitator (Suhardjono and Supardi Arikunto, 2012).

TABLE 5. Implementation of Rational attitude
Rational

Number	Implementation	Percentage
1	Able to be a leader	58,2%
2	Able to work together	85,0%
3	Not afraid of being wrong	60,2%
4	Has high concentration	78,0%

From the results of the percentage of rational attitudes above, it is found that fifth grade students implement critical thinking indicators in class with four implementations, namely being able to become a leader obtained by 58.2% of the total students in the class, being able to work together obtained results of 85.0% of the total students in the class, not afraid of being wrong obtained results of 60.2% of the total students in the class, and having high concentration of 78.0% of the total students in the class. So that it can be determined that the ability to cooperate, which is frequently implemented, is at 85.0%, and the ability to become a leader, which is at 58.2%, is the lowest. Therefore, based on the findings of this study, it can be concluded that someone has a critical thinking spirit if they value courage in themselves to express ideas, think openly, have curiosity, be honest, open-minded, act carefully when making judgments, and solve problems in an orderly and sequential manner in order to achieve the best results (Alatas, 2014). So that this critical thinking ability is always empowered and possessed in every learning process. (Mahanal, S., Zubaidah, S., Sumiati & Sari, T. M., & Ismirawati, 2019) and (Yamin, M., Saputra, A., & Deswila, 2021) claimed that the development of critical thinking skills is not limited to learning. If children are constantly taught to employ their thinking skills in every learning process, critical thinking skills will naturally arise in them, allowing them to not only recall information but also possess the capacity for critical thought.

Higher order thinking is difficult to define precisely, but we can recognize it when HOTS is applied (Lewis, A., 1993). Students will become accustomed to using critical and creative thinking skills while recognizing, analyzing, and solving problems, as well as when creating, by being taught to employ HOTS-based problems. The success of learning activities and the development of students' critical thinking abilities will both be impacted by the provision of HOTS-based problem-solving tasks. Additionally, HOTS is well-known for its traits, which include not being algorithmic, being complex, having various solutions, making nuanced judgments in the face of ambiguity, exercising self-control, and making an effort. (Resnick, 1987). Referring to bloom's taxonomy which was revised by (Rofiah, E., Nonoh, s. A., & Ekawati, 2013) identifies important aspects of thinking, such as analyzing and evaluating. Hots, in the opinion of experts, belongs to the critical thinking category, whereas the objective of creative thinking is to develop creative thinking (Conklin, 2012), (Presseisen, 1988), (Krulik, S., 1995). HOTS is very influential in improving student achievement, especially for elementary school education because at this level students are required to have abilities including critical thinking, reading, writing, counting, and basic communication skills. As shown in the accompanying table, the understanding of HOTS, their features, and the categorization of operational verbs that will cover the indicators are determined by experts' opinions:

TABLE 6. Classification of Operational verbs

Aspect	Indicator	Aspect
Critical Thinking	Analyze	Choose
		Compare
	Evaluate	Inspect
		Measure
Creative Thinking	Create	Establish
		Conclude

Therefore, teachers as one of the determinants of student success at school should be able to pay attention to student characteristics. This is related to the learning model used in the classroom. Teachers also need to design innovative learning and characteristics that suit elementary school children. so that during classroom instruction, teachers and students can cooperate to successfully accomplish learning objectives. Teachers must work harder to maximize the use of higher order thinking skills in the classroom because it is not a simple task. Educators or teachers in the classroom have an important position in managing and motivating students to think critically. In essence, motivation serves as a catalyst for success in the company, and excellent motivation will produce positive results (Kompri, 2016). Therefore, if students have a high level of motivation, it will result in a high level of academic achievement. The learning outcomes in question are when students have completed the process of the learning activity itself (Tohirin, 2011).

When given examples of problems pertaining to the process of creating hydropower electricity (PLTA) through animated videos, the results of the question and answer portion of the learning process reveal that students' problem-solving skills are quite good. That way students when after displaying material in the form of videos directly spark students to start discussing with their peers or between students. So that from this discussion activity students begin to find a way out of the problems given, solve their problems and dare to express their opinions in class. As a result, there will be a reciprocal process between students themselves as well as student interaction with the teacher. Remember that the teacher awards or expresses thanks to students who speak out and share their thoughts. It need not be in the form of tangible items, but the teacher is wise to offer constructive criticism.

The results of these observations and observations can be concluded that the fifth grade students of SD N Sondakan II have a fairly good ability to think critically, supported by the results of the analysis carried out in class, in answering questions by the teacher in a varied manner, there are also students who are successful when giving answers by giving the right reasons, but there are also students who are still hesitant and shy in answering questions accompanied by reasons. The ability to verbally explain what is harmonious within themselves has been developed in students. Apart from having the confidence to voice their thoughts, students can work together to solve difficulties when teachers accompany their content delivery with examples of issues encountered in daily life. This gives them the chance to think critically and form informed decisions. This is in line with Ennis (in Sunaryo Kuswana 2014: 196) critical thinking ability is a reflective ability that is full of consideration in making decisions about what is believed and also what is done.

The Creative Problem Solving learning model is actually learning that centers on creative problem solving so that students are able to develop their ability to solve problems (Afriyuni Yonanda, Devi., Ari Yanto Endah., 2019). Students will eventually be able to build their knowledge by using the process of looking for information to solve difficulties. Due to the fact that this model is one of the problem-based learning models, critical and creative thinking abilities play a significant part in assisting students in becoming effective problem solvers (Sonia Putri, Yelza., Siska Alicia Farma., Rahmadhani Fitri., 2021). Students are also able to make their own decisions and mature conclusions. Critical thinking is essentially an active process, in which a person thinks about things in depth, asks questions, finds relevant information rather than waiting passively for information (Fisher, 1993). Therefore, critical and creative thinking constitute high-level thinking in this circumstance.

Higher order thinking skills must be developed if students are to effectively solve difficulties while studying. Thinking abilities and creative problem-solving abilities are inextricably linked to learning that is intended to develop the fundamentals of higher order abilities, as implied by its name. Additionally, the development of critical thinking must be balanced with the use of a variety of learning mediums. Teachers should facilitate students with media that have high problem-solving power to train their students' skills. Teachers should help pupils by providing them with media that has a high capacity for problem-solving in order to develop their talents. Pepkin (in Cahyo, 2008) Using the Creative Problem (CPS) model, problem solving skills are first taught, and then these skills are strengthened. When faced with a problem students can perform problem solving skills, as well as select and develop responses. Teachers must be able to adapt their lesson plans, instructional models, and instructional techniques to the needs of the pupils of the 21st century (Puspitarini, 2022).

Creative Problem Solving Learning Model as an Alternative model in the Era of Independent Learning

The evolution of society is one of the aspects that influence curriculum change, therefore the curriculum will be viewed as perfect because every curriculum has implementation flaws. As a result, curriculum modifications are required to raise the standard and quality of education in our nation. (Muhammad, 2017). This is demonstrated by the 2013 curriculum transition to an autonomous learning curriculum, which was brought about by the Minister of Education, Culture, Research, and Technology of the Republic of Indonesia (Kemendikbud Ristek RI), Nadiem Makarim. This curriculum concept emphasizes independence of thought. Teachers are given the freedom to translate the curriculum independently for their pupils so that they can meet all of the students' learning needs (Izza, A. Z., Falah, M., & Susilawati, 2020). Teachers are given more freedom within this curriculum, which promotes learning via fun. One must also possess the contemporary pedagogical abilities necessary in order to simulate and implement relevant learning processes. In this case, teachers are trusted to act as drivers and prepare, implement, assess, and follow up on assessments (Sutrisno, Yulia, N. M., & Fithriyah, 2022). These teachers will build on what they already know about how to think, reason, solve issues, rebuild, and more in order to maximize students' potential. These competencies are what learners in the 21st century generation must have and are very important to implement (Angga, Abidin, Y., & Iskandar, 2022).

Instructors must be able to model and carry out the learning process in order for students to select the best learning model. A plan or pattern that acts as a guide for learning is known as a learning model (Trianto, 2012). Both teachers and students should be able to use current technologies to find educational resources from learning activities. Children who learn will become skilled communicators with classmates and teachers both inside and outside the classroom as a type of character development. Being capable, autonomous, and cultured is the most crucial quality in the modern world. The competencies that students must have in the 21st century are thinking competencies which include "critical thinking, creative thinking, and problem solving, and acting competencies including communication, collaboration, and technological literacy." (Indarta, Yose., Nizwardi, Jalinus2., Waskito3., 2022). Technical literacy can be acquired using digital technologies, one example of which is the internet, a modern technology. This means that educators can take advantage of it by selecting the most relevant and appropriate learning model for the teaching and learning process. One illustration of this 21st century learning concept is the fact that adaptive education can take place in both in-class and out-of-class settings i.e. creative problem solving learning. The creative problem solving learning model to be able to understand and solve problems creatively and responsibly, one must have a system for organizing and processing information or ideas (Ningsih, Eka Ria., Wahidin., Roy Pradipta, 2021).

When teaching using the Creative Problem Solving (CPS) paradigm, the teacher acts as a mentor to direct students' creative problem-solving activities (Huda, 2014). While problem-solving is a strategy for handling issues. Attempting to learn as much as possible is not the only goal of learning exercises (Aris, 2014). However, instruction that places a strong emphasis on using all the information acquired to handle new situations and then solving them using the connections of the subject being studied (Hudojo, 2005). The goal of studying problem

solving in and of itself is that a good student will choose pertinent material, assess it, and then finally see outcomes. In certain cases, the challenge is of the kind of complexity that is frequently encountered in daily life. Different factors, including the students themselves, have an impact on how they solve problems. A student's level of problem-solving ability can be determined using any one of six factors, including:

1. Describing the issue. defining the issue, outlining the current issue, figuring out the solution, the requirement for facts or information that must be understood before use comes into play when outlining the issue in greater detail and establishing standards for evaluating the outcomes of the discussion of the issue at hand;
2. Exploring the problem. Identify issues connected to the problem, examine issues related to assumptions, and provide hypotheses to solve the problem;
3. Planning the solution. Students create a plan to tackle the problem, mapping out relevant submaterials, selecting appropriate theories and methodologies for the challenge, and collecting data to identify answers;
4. Implementing the plan. In this stage the student now puts into practice the established and set ideas;
5. Examining solutions. reviewing the approach used to overcome difficulties; and
6. Evaluate. At this point, the solution is examined, initial claims or hypotheses about the solution are formed, estimates of the results of its application are produced, and the solution is communicated (N. J. Mourtos, 2004).

A problem that can be solved by instructing students based on problem-solving techniques is one of the lessons used by teachers to address the imbalance in the process of completing the learning material provided to students. Similarly, this creative problem solving learning is one of the learning alternatives because it has several advantages including (1) training students in designing an idea of thinking, discovering, and acting creatively (2) can develop students' creative thinking skills inside and outside the classroom because at the beginning of learning students will be presented with a problem then the teacher will provide freedom to find various ways to solve it (3) students can solve the problems faced logically (4) making students able to apply their knowledge to new domains of life (5) can encourage students to have advanced thinking in solving each problem appropriately (Rahman, A. F., dan Maslianti, 2015). In this era of individual learning, some of the benefits of creative problem-solving learning can undoubtedly aid in resolving issues with learning. (Ratnasari, 2005) Learning through traditional lesson-based instruction is inferior than learning through problem-based instruction in terms of student reasoning skills. Like in daily life, there are many challenges that cannot be managed alone, but when they are addressed in conjunction with other challenges, both may be overcome. Similarly, students will not be able to solve all the challenges they face on their own; in some cases, they will need to work together in a group. The teacher's job is only to provide subject matter or discussion topics that can stimulate students to think creatively in solving problems (Purnama Putra, 2018).

CONCLUSION

The creative problem solving model as a learning model in the era of independent learning has achieved learning objectives. Where in the use of this learning model is used as a reinforcement of students' critical thinking. The creativity of learning formed by elementary school teachers, one of which is the creative problem solving model, has helped students in learning in the era of independent learning. Students evaluate using the creative problem solving learning model as a successful and efficient learning model and are engaged by students compared to other learning models so that in learning in this autonomous learning curriculum. As evidenced by the instructor's readiness to teach in class and the manner the teacher adapted the shift of the new curriculum to all pre-existing hurdles, we also noted that the school was prepared to become familiar with the new curriculum. This preparation included both proactive steps and full flexibility.

The implementation of independent learning must continue to be carefully assessed by educators, especially instructors, the education system as a whole, as well as other stakeholders (students, parents, and other stakeholders). So that initiatives to increase students' critical thinking, particularly among high school students, keep improving quality by emphasizing effective learning. No more irrational and aimless educational approaches. particularly at this era of new curriculum adjustment.

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