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Education in Psychomotoric Aspect and Creative Development

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ABSTRACT
Global currents have a strong influence on educational policies, practices, and institutions. Education is faced with demands for flexibility and adaptation to meet the demands and opportunities of the world of work. Class activities (learning) should provide students with the provisions needed to live side by side with those with diverse socio-cultural, political, ideological and religious backgrounds. Creative power (creative power) which includes creative thinking, creative attitudes (creative behavior), and creative practice is a gift from God to every individual needed to face life. The actualization of creative power is very much influenced by many factors such as the approach and education model are given. The development of creativity in the classroom (learning) will result in creative students and creative students in general having higher and stronger abilities than ordinary students [not creative]. The ability to think creatively as a creative component will produce effective learning or further develop high reasoning power that can be used to solve learning problems. The development of the creative potential of students will result in superior learning. This will be realized when (a) teacher-educators are equipped with creative teaching competencies, (b) school leaders provide opportunities or freedom and blessings to the school community members (teachers, students, staff) to express their creativity, (c) physical and social environment and facilities that support the growth of the creative power of students.

Keywords: *Creative Teaching, Creative Power, Creative Thinking, Creative Attitude.*

1. CREATIVITY

Creativity has re-emerged as an important issue in responding to the challenges of the global era. The government, for example, in 2009, named after the 2008 world economic crisis, issued INPRES No.6 concerning "Creative Economy Development" as a legal basis to make the necessary efforts for developing the creative potential of the nation's citizens in facing the challenges of a very competitive life (global). The Ministry of Education has made several skills needed in the global era or the 21st century (skills for the 21stcentury) such as critical thinking (HOT or high order of thinking), creative problem-solving skills as the target achievement of the recent Cabinet education program [1].

There are some important things that can be used as the basis for a program to increase the development of creative power through educational units as follows: First, Globalization is the process of accelerating the internationalization of various dimensions of life, and the interconnection of one nation's life with other nations through global networks. Globalization is also characterized by a high level of competition and it has an impact on the order of life, such as economy, politics, culture, technology and education [2]. Second, the changes that occur in the world run rapidly and require that everyone can constantly solve tasks and problems in new ways. This era requires people to always learn (lifelong learning) to update what they have and people need to think of new ways of dealing with life's problems. Life problems found in a family, community ,or nation are more complex which requires us to think creatively and divergent in resolving them [including

conflicts][3]. In responding to the fast development of life (science and technology), a nation like Indonesia needs creative thinkers and creative technocrats. On the other hand, creativity or creativity is a representation of the character and its growth among the citizens of the nation will give meaning to the improvement of the dignity of the nation (human).

Third, the employment opportunities that will be filled by our children who are still in education are not yet clear. Meanwhile, what the school provides, namely knowledge and skills, cannot be applied directly or directly in part oflives there. The skills and knowledge necessary for the life (world of work) to come are not known with certainty at time.

Therefore, the knowledge that is passed on to the nation's children needs to be innovative and adaptive to the changes that occur. Students need to be equipped with knowledge and skills that are adaptive to change (progress). Meanwhile, society desperately needs its citizens who have inventive, useful, nimble (flexible) and adaptive characters in facing rapid changes. The ability of schools to develop creative thinking skills among students has a very important role, because educators are a determinant of its implementation. For this reason, the professional abilities of educators which include content, pedagogical skills and soft skills (which include being creative, respecting one's own identity while respecting the identities of others) need to be improved through various program schemes so that our educators have world-class abilities. (globally competent teachers). Fourth, creativity is "personal wealth" (personal properties) which is a gift from the Almighty which is manifested in attitudes or characters such as flexible, open, autonomous, open-minded, the desire to try something (curious), firm (strong-minded), the ability to describe ideas, the ability to assess oneself realistically (knowing himself = *'arafa nafsahu*) all of which are necessary (prerequisites) to bring out creativity. Fifth, mental health and creativity. The idea of the relationship between creativity and mental health is an old issue in psychology. concept Self-(self) and (self-actualization self actualization) is the key or heart of the development of a healthy personality. in the classic study, emphasized the importance of an “open, flexible and tolerant” attitude or character for mental health. In other words, cultivating or developing the creative potential of individual citizens of society will improve mental health, especially in terms of "self-actualization"[4].

Some experts agree that education is a key that is expected to play a role in responding to the demands of the global era or the 21st century. The world of education is faced with demands such as flexibility and adaptive, for example, to meet the demands and opportunities of the world of work — increasing the ability of workers. Schools and learning should provide the necessary provisions to live side by side with those with various socio-cultural, political, ideological, and religious backgrounds. Learning can help strengthen a sense of identity in a variety of affiliations of views, ideologies, or ideologies [5].

Based on the considerations above, the development of creativity in the world of education (creative learning, creative schools, creative teachers, creative school leaders, and creative students and an environment that is conducive to develop creativity) is important considering that our education world is still faced with fundamental problems, for example. equal distribution of the quality of learning outcomes, the quality of learning, access to quality education for all citizens of the nation, teacher competence, and educational resources as well as geographical conditions. The ability to change problems or limitations found in the delivery of education at the classroom level (learning) in educational units will be an energy and impetus for the development of (actual) creative potential among the school community and is an important part of preparing citizens to face global challenges. Therefore, learning that encourages the growth of creativity, creative thinking, the ability to solve (creative problem solving), problem-based learning, the concept and approach of "limit to reach unlimited (in limited circumstances can produce extraordinary work)" becomes significant to develop creative learning and facilitate the formation of creative citizens of the nation.

2. SCHOOLS AND THE DEVELOPMENT OF CREATIVE POWER

Global education emerged as an effort to prepare young people so that they were ready to face a world full of challenges and the interconnectedness of one nation to another, one dimension of life to another. Schools or educational institutions prepare young people to live creatively and work together in facing global problems.

On the other hand, this global condition has encouraged the development of scientific disciplines that give strength to move out of the grips towards understanding global systems and dynamics (interconnected worlds) [6]. Global education campaigns to change the traditional way of learning, rote pedagogy, to the concepts and models of constructive and multidisciplinary learning. Changes in pedagogical understanding are needed to provide students with the skills and abilities (aptitude) needed in global life, namely learning is self-motivated and directed; which emphasizes meeting the needs of students in various dimensions, namely aesthetics, moral, emotional, physical and spiritual in global life, intellectuality, building knowledge in the learning process, namely dynamic interactions between teacher-educators, students and sources of information

abundantly [7]. Teacher-educators must be able to deliver the messages (awareness) contained in materials such as equity, justice, respect for the rights of others, cooperation and interdependence. Teacher-educators provide students with the opportunity to build knowledge and perspectives on topics or areas of study. For this reason, teacher-educators must be equipped with hundreds of ideas, abilities about how to teach the dimensions of globality, includinghuman diversity, which is the main idea of global (creative) education.

3. FOSTERING CREATIVITY

This section will discuss things that need to be considered in growing and developing creative potential or creative capital that exists in the school community (students, teachers, and management) at various levels. Also, the diversity of the socio-economic and cultural backgrounds of the community needs attention. Also, the diversity of problems or challenges faced by educational institutions per level in each region is a factor that cannot be ignored. All of them can influence on the development of creativity in each educational unit. The forms and approaches of learning and the evaluation of creative learning. Therefore, a careful study of the peculiarities of the problems that exist at each level of education in each region is very important.

In Papua or Kalimantan, particularly in some remote areas, for example, children have difficulty getting writing tools such as pencils. When the children play and grill the fish, they will get inspiration (creative ideas) from the charcoal left from the grilling of fish. For example, at first they casually scratched charcoal from the burning wood of used paper fish or soil, then got black scratches. From the black scratches, the head has the idea or thoughts to use charcoal as a writing tool (pencil). The children learned to write with their pencils. It is different for urban children, whose electronic equipment is not something strange, they will have different or different ideas from their friends in the interior of Papua and Kalimantan. Children in urban areas will make learning games that their friends can use via cellphones as a manifestation of creative attitudes and actions.

From this illustration, we can conclude that two groups of children (rural and urban) naturally have the same potential and create value. It's just that the actualization of the potential and creative values will be influenced by the carrying capacity of the environment in which the children live. The peculiarity of the environment will give color to their creative character. The culture that exists in the children's environment gives a creative style think, behave and act.

The two examples of creative Indonesian children in the illustration above give us an indication that although the number of creative Indonesian children is large, their number is still small compared to the population of Indonesian children. Therefore, the creative potential of all citizens of this nation, especially students at various levels and educational units, needs to be actualized optimally so that it becomes the nation's capital. This section will discuss several matters related to the development of a creative spirit, namely the creation of a creative atmosphere or environment, creative learning and the creation of appreciative vehicles for the development of creative power.

Creativity as mentioned earlier includes three dimensions, namely, creative behaviour ,creative thinking and creative acts. These creative dimensions can be developed through school. The creative potential of students, according to Cropley, [12] can be developed using various methods or approaches. Teachers, for example, help students generate new ideas (inventions and original) by, among other things, arranging classes that give students ample opportunities for creativity, willingness to accept or tolerant of creative behavior; develop students' interest in being creative (creative) and convince them that they have the potential to become creative people. Also, teachers can stimulate creativity in the classroom by displaying creative attitudes and behaviors (such as role model, self-confidence). In short, it can be concluded that there are several conditions needed to foster creative behavior, attitudes and actions in the school environment.

3.1. Creative Thinking and Critical

The teacher is a determinant of the learning climate. Teachers must create oases in the classroom that can protect students from the pressures that arise in everyday life The creation of a climate or creative atmosphere is intended to present an atmosphere that stimulates the emergence of creativity from the start of the process, namely the simplest form and continuous facilitation in developing creativity to develop and reaching the peak of creativity, namely creative work that has value and usefulness for many people. The creative process will emerge when a person is in an atmosphere (feeling) safe, comfortable, and happy to convey thoughts, ask questions, or ask questions and express creative ideas. On the other hand, the creative process will be difficult to develop if the individual feels uncomfortable, let alone feel very threatened or depressed. For this reason, the attitudes, behavior and actions of the people around them make individuals feel insecure, uncomfortable, neglected, disrespected, depressed and humiliated. A conducive atmosphere as intended is actually born in the school, family and community environment. This conducive atmosphere can be presented through the optimization of the functions of the three main elements, namely the teacher as a creative role model, the physical environment and the non-physical environment.

3.2. Role Model: The Creative Teacher

Teachers are the key to successful education. Paulo Freire [2] is obsessed with an education that frees the human spirit from all forms of pressure, restraint, let alone "colonialism". People whose souls are liberated will be able to transform themselves into creative beings. For this reason, reliable teachers can be seen from their knowledge and commitment to understanding the community as a practical concept of education. In this regard, teachers are required to act as creative role models who develop attitudes and behavior for themselves and their peers that encourage the formation of a conducive atmosphere for the development of the creativity of students. Several studies have shown that there is a direct relationship between creative exemplary in the form of attitudes or creative thinking (divergent thinking) that emerges from the figure of the teacher or (they are formally aware of it or not on purpose) with the appearance of divergent thinking in front of their students. Likewise, students who have high divergent thinking skills will have very good achievements in learning. It also has a relationship with teachers who have high divergent thinking skills, even though both - teachers and students - may not be so concerned with what methods or approaches are being applied to encourage their divergent thinking skills (students) to develop. Teachers who have high divergent thinking abilities can encourage the growth of creativity among students, even though the teachers do not make a special and deliberate effort to foster creativity. Therefore, exemplary creative behaviour from teachers is a strong or major factor that can develop creativity among students [12].

Exemplary teachers can be manifested by the ability to develop creative communication that is oriented towards stimulating creative thinking and behaviour among children (students). Creative communication includes at least five communication behaviours, namely serving, stimulating, accepting, supporting, and promoting. Serve means to be open to all questions and challenges of creative children. Teachers serve students who need responses, answers, assistance, and guidance to undergo a creative process patiently and enthusiastically. To grow the creative potential of students, teachers (as role models) are required to make changes to the 'conventional' approach and communication patterns of students. Teachers must abandon the old pattern of approaches that do not stimulate the growth of children's creative souls. Teachers must throw away negative attitudes such as answering students' questions, not serving questions, closing communication before completion, criticizing those who tend to underestimate when students start a creative process. Such negative communication attitudes and behaviours will create an unsupportive atmosphere (discourage) and will even destroy the potential and creative processes of students.

3.3. Physical Environment (Physiological State)

Headings may be numbered or unnumbered (“1 The physical environment includes the physical environment of the school and outside the school. Space/infrastructure in the school environment is arranged into an environment that can stimulate students to be creative. The physical environment will stimulate the five senses of the students which foster an attitude of curiosity, critical thinking, creative thinking and even being creative in all forms/content. Space/infrastructure outside schools, for example, parks, buildings, fields, houses, public facilities, play-ground, infrastructure and the like, is arranged into an environment that makes students interact. Outside the school environment to stimulate the five senses of the students bore the attitude or behaviour of a high curiosity (curious), critical thinking, creative thinking and even creative in any form/content (content/material).

3.4. Non-Physical Environment (Psychological State)

A conducive environment will be the energy to generate creativity. Creativity in class or learning requires not only the knowledge and abilities of teachers and students but also a classroom environment that can develop self-confidence and courage. Teachers can use their influence to create an atmosphere in which creative learning engenders. Realizing creative learning requires the ability to generate ideas and emotional and motivational conditions. This condition includes the individual's desire to function creatively. Furthermore, creativity requires an environment that gives freedom to individuals to express ideas, responsive to new ideas that allow students to evaluate freely from fear, rejection, or cursing. For this reason, teachers can help get rid of all obstacles that prevent creativity from appearing or growing, namely building an atmosphere or environment that allows students to express their ideas or thoughts freely [16].

The non-physical environment includes the following: conditions Intrapersonal conditions that support objective- and creative thinking are developed when the teacher helps students understand divergent and confident thinking skills, even though there are counter-movements to developing creativity. Emotional conditions to bring out creativity need to be developed or improved when teachers encourage their students to realize and respect the feelings of students. At the same time, a motivational climate that supports the growth of divergent thinking is grown when anxiety decreases and feelings of being threatened are marginalized. One way

is to improve the interpersonal state that supports growing critical thinking power. For example, teachers encourage creative students to present ideas that are relevant to other people's goals. At the same time, students are guided to be able to express criticism of other people's ideas constructively and positively. Teachers not only help creative groups of students but also help their parents understand that their children are different from other children (creative). Teachers should play a role in overcoming the factors that will hinder the birth of the ability to think divergent by (a) eliminating negative sanctions against those who oppose divergent thinking; (b) reduce feelings of worry "true or not true" of individual ideas, works, and actions; (c) overcoming feelings of disconnection and feeling of being alone (or meaningless) among those who have high divergent thinking abilities; (d) prevent ridicule or insults from the group; (e) reduce misunderstanding and hopelessness with parents. Climate or non-physical environment that supports creativity not only requires the elimination of negative elements or barriers to the emergence or development of creativity, it also presents positive factors, for example (a) sensitive to one's feelings; (b) paying attention to sensory experiences; (c) open to new ideas; and (d) appreciating new ideas or strange ideas [12].

4. TEACHING AND LEARNING CREATIVITY

The formation of creative behaviour including creative thinking requires a supportive atmosphere/climate. The facility begins with thinking about software in the form of module design curriculum, objectives, targets to be achieved, methods, and techniques for implementing it, and evaluation of the implementation of the module. In addition, to make it happen in operational activities needed, the hardware is, in the form of physical and non-physical support facilities. The goal of creative teaching and learning is to make changes (transformation) from passive attitudes to acting, thinking and acting creatively. Students are expected to achieve a change in attitude through the appropriate learning process, both in materials, approaches and learning methods. The attitude of a creative person is characterized by some characters, for example, a strong curiosity to get answers to everything he observes and thinks about, attitude and views open to all observed phenomena (open-minded), perseverance, strong intrinsic motivation and have the endurance (endurance) to keep thinking until reaching the results of thoughts such as ideas or real products. Students also have a flexible character in the sense that they are agile in thinking from one dimension to another, fluently and easily generate flowing ideas, using lateral or divergent thinking.

Creative attitude is a mental process that can produce a creative or innovative work that is useful in the form of objects or non-objects provided that there are environmental facilities available for that creation. Therefore, in the learning process of students to be creative mentally, they need to be directed to always hone the mental process and be given opportunities and facilities for the growth and development of that creative power. This formation process can be done in several approaches depending on the operationalization of the creative concept and the context of the capabilities to be achieved. Some of the definitions used are the creation of new, original ideas (sometimes the definition is considered ambiguous. For example, whether an idea obtained from a modification of what was previously existing can be said to be original/original or creative), a new work that is beneficial to human life, recombination of previous works, and so on.

This difference in understanding has consequences for different methods and techniques in learning. These learning methods and techniques must consider ways of delivery that shape creative mental processes. As an example of a method that facilitates the creation of a creative process through the so-called Creative Work Principles. The principle of creative work is characterized by, for example, learning process that occurs in total between sport if think if the taste if the liver; occurs randomly with a journey starting from the idea/idea - then the process - to the final result; using logic, taste, imagination, intuition; the statement process (concretization) of an abstract struggle into a form; relative (even subjective) point of view or perspective. Creative work-oriented process continuous and the outcome is a temporary conclusion; and the formation of a new consciousness is very important. Other approaches include a method called cooperative-holistic, which uses the Neo Humanistic Education (NHE-Learning) approach, which follows a gradual process starting from Orientation, Exploration, Participation, Interaction, Social Skills: Leadership.

Whatever approach is used to foster attitudes and motivation to think and behave creatively, the application goes in a process, or in stages according to the development of students according to levels (early childhood education, elementary education and secondary education). The meaning of gradual is also intended as a consideration for the formation of attitudes starting from the formation of creative behaviour or attitudes to acting creatively and producing creative products. Teaching methods and techniques and learning must also be supported by several preparations and facilities so that the goal of 'creative education' is achieved, such as external conditions such as vehicles that trigger the creative process, facilitators who can inspire creative processes, physical and non-physical means that stimulate students to creative thinking,

networking that facilitates access to creative action, parental support, and an education system that empowers creative learning. Also internal conditions in the mental processes of students which characterize the feeling of relax-free-play, divergent thinking processes, the formation of an attitude of interest in motivation to be creative, and the emergence of a new consciousness as a result of the learning process.

4.1. Increasing Creativity among Children

Mayeksi explains that there are two things that need to be considered in fostering creativity in students, namely development (developmental level) and individual differences. Developmental level of physical, social, emotional, and intellectual growth rates. Individual differences are the different levels of progress achieved by each in an area. For example, what are the specificities, interests, abilities, skills that have developed; family circumstances. Both are components of developmentally appropriate practice. Maya distinguished her approach in developing creative children at an early age and the age of 4 or 5 in elementary schools or upper elementary schools. However, to develop creative abilities requires knowledge and skills. For example, PAUD teachers will provide knowledge and skills as well as an environment that encourages the growth of creative thinking among their students [17].

Increasing activity in children is carried out through play and the exploration methods. For example, the teacher invites students to play on the computer, which is mainly done through exploration to find out, for example, what can be done with computers. The duration of exploration depends on the frequency of exposure of students to the curriculum. Armed with skill, the students felt comfortable using a mouse, for example, then they started playing the computer. In that way, students gain knowledge and skills through formal experience. Children explore and play with materials or materials in the environment and these activities and these activities form 'the brain' [14].

Besides, it must also be supported by a positive naming attitude (promoting creativity through positive acceptance). Acceptance Positive of students is carried out by, among other things, the teacher showing openly to students that curiosity, exploration and true behaviour have an important meaning. Teachers provide opportunities for students when students do activities that are of interest to them. Teachers let their students carry out activities until they feel that the work has been completed or completed. Teachers allows students to think about how to do something if they choose to make an action. Creating a relaxed atmosphere can also be done by the teacher. Teachers encourage their students to think or guess something, especially when the answers made make sense.

4.2. Developing Children's Creativity through Learning (Curriculum).

Several principles need to be considered, namely: the curriculum should be designed appropriately for children, selecting materials and activities that are useful and relevant to children's needs. The teacher also prepares religious materials that can encourage children's creative exploration, which is to give children adequate time to determine what to do. The teacher considers the type of learning style and multiple intelligences. Students are encouraged to think divergent and have a high curiosity. The teacher prepares a point system for each child's question that shows curiosity. Teacher could provides many opportunities for students to interact and communicate with friends and adults in an atmosphere that feels welcome. Learning that encourages creative growth is carried out in various forms, for example, through experimental science lessons and discussion of an issue [3].

4.2.1. Integrated Curriculum.

Curricula are designed around a theme or class project. The learning unit consists of a series of learning activities that are designed based on a large topic involving the entire group. This topic contains units of learning areas such as reading, mathematics, science, social sciences and prepares or provides topics and frameworks for planning activities for students. Students as a whole try to experience

4.2.2. Differentiated Instruction (DI).

DI is a way of thinking about learning that is based on the following principles or views: (a) Children of the same age have differences in several things, namely learning readiness, interests, learning styles [styles of learning], and experience. (b) These differences affect what students need to learn and the main task of teachers and schools is to maximize the abilities of each student. (c) DI is also an improvement effort to achieve a high-quality curriculum and learning and students are involved in setting goals. (d) The curriculum has a relationship with the experiences and interests of students. Therefore, DI is intended to maximize children's growth and help children achieve progress.[3]

4.3. Creation of Creative Vehicle

Teaching and learning processes alone are not sufficient to be able to form and develop creative attitudes and motivation in students. Therefore, we need a means that can sustainably maintain and maintain the attitudes and motivation of students in a steady creative process. The creation of creative vehicles is a stimulant that is always present and inspires students to be creative. The teacher plays the role of sponsoring

creativity, that is, the teacher does activities that encourage students to be involved by giving gifts for creative behaviour, providing opportunities for achievement (success); Facilitating the growth of divergent thinking abilities by providing opportunities for students to communicate their ideas to cloth people and to acknowledge or appreciate creative ideas or divergent thinking abilities. Teachers can provide more flexibility for students to "play" with problems, materials, and ideas or inject fantasies as a source of ideas. This can be done through activities - conducting science fairs to exhibit machines that will be produced or needed in the future, organizing drama festivals with themes of the future and fantasy, or having children be taught to describe historical events that will occur.[12]

4.4. Provision of Institutions and Creative Events

To create a Creative Vehicle, outside of school institutions, other institutions are needed that feel committed and responsible for building a creative educational atmosphere for students. This institution is not limited to government institutions and institutions, but must also extend to empowering all institutions in society so that awareness will grow in them of the importance of the creative thinking process so that in the next process it can become a foundation for raising awareness to develop the Creative Economy. Suciu Marta Christina from the Bucharest Academy of Economic Studies, Faculty of Economics, Economics and Economic Policies Department stated that the prerequisite for the formation of a Creative Economy is Urban Development and the Community that supports it. Meanwhile, Florida, [7] from the University of Toronto stated that the creation of Creative Vehicles was also supported by what he called the "Creative Class", which according to his observations could be a driving force for economic development of cities in America after the post-industrial era. The three Creative Class groups mentioned by Florida are Super creative Core, Creative Professional, and Bohemian.

Apart from institutions and Creative Class, an institution that is also important for the development of creativity is the home/family as the smallest group in society. Home or family should be the beginning of stimulation of the creative learning process for students, which in the continuation and development of access to subsequent relationships with other institutions outside the home can be expected to reinforce attitudes and behaviour patterns accustomed to being creative.

4.5. Giving Awards for Creativity

Another event that is no less important for building Creative Forum is the consistent treatment in the form of appreciation, recognition, praise, for their creative work. Students who consistently get recognition and respect in proportion to their work, especially those with creative value, feel that they have a place for their achievements so that they can foster self-confidence and positive self-concept. Besides, there will also be attitudes and behaviours to always want to work, an attitude of optimism and enthusiasm that he can achieve and this achievement is appreciated openly. This treatment will maintain students' motivation to continue to be creative so that in the end it becomes a basic need and intrinsic motivation to demonstrate their ability as part of their contribution and responsibility to the environment around them. Giving this award is the responsibility of all parties in society.

5. CONCLUSION

Teaching and learning assessment of the creative process is aimed at two objectives. First, evaluation of the mental process of creative thinking that has been formed through that learning; and second, creativity results that can be in the form of ideas an objects/forms, which may be final or temporary. Evaluation related to the mental processes formed in students can use the following behavioural traits as a benchmark: whether students are enthusiastic/enthusiastic about being creative, responsible attitude towards the results of their ideas/creations, increased creative skills/techniques, mastery of material/themes a creative arena, an attitude of exploration, a conducive and effective cooperative behaviour, the optimization of individual work, the growth of self-confidence, and openness and willingness to present the results ("temporary").

Evaluation of the results of the creative process can be measured as was done by Torrance. In this evaluation, the indicators measured are divergent thinking and ability problem solving which is assessed from the Fluency score, the number of ideas that are streamed, Flexibility, the agility of ideas moving from one theme to another, Originality - originality and uniqueness of ideas, and Elaboration - in-depth and detail. ideas that can be described. He developed the Torrance Test of Creative Thinking [18].

(TTCT) to measure how a person's thinking deviates from a norm for assessing creativity. Also, Torrance developed the Thinking Creatively in Action and Movement (TCAM) because he realized that verbal and written responses were not sufficient for children, namely, preschool and kindergarten children. Another effort can be made with intelligence quotient (IQ), namely the Creativity Quotient (CQ), although this assessment is still and cons among experts who measure creativity.

Guilford's psychometric approach measures, for example, several things as indicators of the process of thinking and acting creatively. For example, through the

speed of flowing ideas or ideas from a given stimulus, creating as many titles as possible from a given story, making as many pictures as possible from the stimuli of a given image, and so on. Guilford identified the main components of divergent [thinking] work that has been the backbone of some research and creativity assessment. Namely fluency (generating or giving birth to several ideas), flexibility (generating or giving birth to several different types of ideas from different perspectives), originality (generating or giving birth to strange or unusual ideas), and elaboration (adding ideas to improve ideas). Guilford identified two categories of creative abilities ["slab/block" thinking divergent and transformation, the ability to improve that someone experiences or are known to give birth to new forms/ideas [2].

In education, there are three factors that are closely related to each other others, namely the objectives, the learning, and evaluation process. The goal becomes the starting point and a reference for the learning and evaluation process. The learning process determines whether educational goals are achieved or not. And only witha good evaluation of educational and learning objectives can be identified the result.

The aim and evaluation of education in the country today usually follows taxonomy or domains developed by BS Bloom. According to taxonomy, educational goals are classified into three domains, namely cognitive (knowledge), affective (attitude) and psychomotor (skills). But in reality, education in the country is trapped in the realm of good cognitive in the objectives, learning process and evaluation. This is possible caused by a weak understanding of the affective and psychomotor domains, in addition to developing measuring and measuring tools for learning outcomes those two realms that were more complicated and difficult compared to existing in the cognitive realm.

Therefore, this paper will discuss one of the domains that are, the measurement of the psychomotor domain. Definition of Psychomotor Domain, Psychomotor speech is related to the word "motor", sensory-motor, or perceptual-motor. So the psychomotor realm is closely related to work muscles causing movement of the body or its parts. That included in the classification of motion here starting from the simplest motion namely folding paper to assembling television spare parts as well computer [13].

The psychomotor domain is a domain related to skills (skill) or the ability to act after a person receive experience. certain the learning outcomes of the psychomotor domain were first put forward by Simpson which states that this psychomotor learning outcome is visible in the form of skills (skills) and the ability to act individual [19]. So what is meant by skills here are activities related to nerves and muscles (neuromuscular) which is usually seen in physical activities, such as writing, typing, sports, and so on. Despite their motor nature, but they require careful coordination of movements and awareness which is high [1].

So it can be said that the main target of the psychomotor can be classified into two, namely 1) striated muscle ability or 2) ability to perform special skills [20]. So it can be concluded that the successful development of the realm Cognitive also will positively affect the development of the sphere psychomotor. However, psychomotor skills cannot be separated from skills affective realm. So psychomotor skills are a manifestation of insight into knowledge and awareness as well as mental.

a) Processes for the Psychomotor Domain Measurement of the psychomotor domain is carried out on learning outcomes in the form of appearance. This can be seen from two things:
b) The ability of striated muscles, the target ability of striated muscles requires students to using his body to perform physical labour within detailed parameters certain (for example, time, weight, and distance).

Ability to perform special skills, ability targets performss specific skills demand students to take advantage of the ability of striated muscles to carry out certain physical last measurement, it must be specified, among others: method holding, how to put/tuck into the armpit or mouth, the way reading numbers, how to put it back in place, and so on. This is all depends on our will, as long as the measurement objectives can be achieved [11].

Some expert explain who explain how to measure learning outcomes psychomotor Ryan explained that learning skills can result measured by [16].

a) Direct observation and assessment of learners' behaviour during practice learning roses lasted
b) After participating in the lesson, namely by giving tests to students to measure knowledge, skills, and attitudes.
c) Sometime after learning is complete and later in the environment it works.

Below is a schematic for obtaining a global picture of the psychomotor realm [9]. Category types of behaviour Internal ability Operational verbs:

a) Perception Interprets stimuli, Sensitive to stimuli, Discriminate, Choose, Distinguish, Prepare, Set side, Show, Identify, Connect
b) Readiness to Concentrate Prepare yourself (physically and mentally) Start, Getting started, React, Prepare, Initiate, Respond, Show
c) Guided Movement Copying an example, Demonstrate, Play, Follow, Do, Make, Try Show, Install, Take apart

d) Movement Accustomed Skills, Stick to the pattern, Operate, Build, Install, Take apart, Improve, Implement, Do, Arrange, Use, Set, Demonstrate, Play, Handle.
e) Movement complex Skilled in: For example, fluent, flexible, sociable, agile, agile.
f) Adjustment of movement patterns: Adjust oneself, Varies, Change, Adapting, Rearrange, Making variations.
g) Creativity: Creating new ones, Initiative, Designing, Arrange, Create, Design, Design building, it made up, Engineering, Combine, Set, Plan.

From the chart above, it can be seen that the psychomotor domain includes things: [11]

a) Perception: refers to the process of awareness of changes after activity: seeing, hearing, touching, feeling smells, and movements from our nerves and closer to our five sense organs.
b) Readiness: pointing to the next step after the perception of inner abilities differentiate, choose to use the right deep neuromuscular make a response. The goals in terms of readiness are; Readiness mental: selecting and synthesizing. Physical readiness: to adapt neuromuscular abilities. Emotional readiness to respond according to the right attitude.
c) Guided movement: with the above perceptions and readiness, develop skills in activities. That is the goal in this stage is imitation (imitating an example); show something.
d) Accustomed movement: after passing through the guided movement stages, then will find in movement accustomed to one skill The goal in this stage is to begin to emerge velocity within use a certain time on one particular skill.
e) Movement complex: the use of some skills in a complex activity, includes all of the above movements.

Psychomotor Aspect Measurement Techniques. Several techniques can be used to assess and measure psychomotor aspects in students, including: [9]

a) Evaluation through a portfolio. Evaluation through the portfolio is an attempt to obtain of variety regular, continuous and thorough information about the process and the results of growth and development of knowledge, attitudes, and insights skills of students who come from records and documents experience. Evaluation through performance (performance)
b) Evaluation through assignments (projects). Evaluation through projects is carried out on an investigation conducted by students individually or in groups.

From some of the above, it can be concluded that the sphere is the realm psyschomotor related skills (skills) after a person receives a certain learning experience, and is closely related by working muscles, causing the motion of the body or part with meticulous with motor coordination and awareness high.

Furthermore, the measurement of the psychomotor domain was carried out on the results learning outcomes in the form of appearance, which is a continuation of the cognitive and affective. This can be seen from two things; Muscle abilities striated and the ability to perform special skills.

There are seven important categories of psychomotor behaviour types, namely: other; perception, readiness, guided movement, accustomed movement, movement complex, adjustment of movement patterns, creativity.

There are several techniques for evaluating the psychomotor aspect, among them; evaluation through the portfolio, evaluation through performance, evaluation through assignment (project)/

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