# METACOGNITIVE ABILITY EMPOWERMENT AS A MEANS OF DEVELOPING LEARNERS' CHARACTERS

Ika Mustika STKIP Siliwangi, Bandung <u>mestikasaja@yahoo.co.id</u>

#### Abstract

The shifting of era to severe globalization may lead to the fading of one's character especially learners as youth who are vunerable to this issue. School as formal education institution is a powerful means in the process of learners' character formation in addition to family. School as the learners' second home after family must be able to provide adequate practice of character education so that it can produce youth generation who have not only intellectual intelligence but also emotion and spiritual intelligences. Those three shall create a characterized youth of nation. In realization, it means implementing character education through the process of learning. In this case, it needs teacher's ability to plan and conduct the learning process leading to the process of learners' character formation. One of the ways that can be done is by empowering metacognitive ability. The empowerment of metacognitive ability may be conducted by teaching the learners to use metacognitive strategy. By empowering metacognitive ability, learners are expected to get used to always monitor, control, and evaluate their learning comprehension. This ability is essential to be mastered thus the learners can have responsibility of their own learning. Being responsible is a basic value which is universally recognized that learners should have. In conclusion, this basic value is the benchmark of the learners to behave and act in accordance with moral code. This is beneficial to live their lives in the future.

Keywords: Metacogntive Ability, Character Development

## A. INTRODUCTION

Recently character development has been the main priority in Indonesian education enforcement. Education should be able to escort Indonesian youth to become a personality that has not only intellectual intelligence but also emotional and spiritual intelligences. It is no doubt that there is demand of realizing the implementation of the desired education. It needs a well cooperation among community elements for character education may implement when all elements involved. As suggested by Zubaedi (Mustika, 2012:70) character education involves educators as well as the education components including family and community. It also needs a continuously effort. Character Education Team (Mustika, 2012:71) explains character education is a staged activity, started from the stage of knowledge, stage of application, and stage of habits. It means character is not an automatic behavior but developed gradually. Furthermore, it is also mentioned that character educator is an integrated part of school subjects. Therefore, optimization of character education at school can be applied through learning process and continuously practice.

In relation with the above explanation, a teacher sis expected to be able to plan and conduct the learning process leading to the process of build ing learners' character. One of the ways is by empowering metacognitive ability. It can be done by getting the learners to practice using metacognitive strategy in the classroom. Flavel (Mustika, 2012:6) stated that basically every person has metacognitive ability and it can optimally develop through continuous practice with the help of educator so that it becomes a habit. Below, it will be explained the implementation of metacognition in the process of learning and its implication to the building of learners' character.

### B. **DISCUSSION**

#### 1. Metacognitive Ability

At first, the theory of metacognition was a field study of psychology that was firstly introduced by John Flavell. Today, the theory of metacognition has been addopted to several fields, including pedagogy. The function of metacognition in the field of education is to be used as a means to facilitate the process of learning (Mustika, 2012:40-42).

Flavell (Mustika, 2012:42) defines metacognition as one's ability to manage his/her cognitive process independently. It implies that cognition is different with metacognition. This separation triggers controversy due to the difficulty to detach cognitive and metacognitive. Further, Flavell describes the differences of cognition and metacognition based on the characteristics of their content and functions. Based on the content, metacognition consists of knowledge, skill, and information about cognition. Cognition is a mental description. Meanwhile, based on the function, metacognition manages cognitive operation in problem solving or task activity. Cognition is used to solve a problem for a better result. Flavell concludes that cognition processes



knowledge while metacognition creates one's understanding about knowledge. However, Flavell admits that cognition is not different with metacognition.

Still according to Flavell (Mustika, 2012:49) metacognitive ability includes metacognitive knowledge dan experience or metacognitive regulation. Metacognitive knowledge includes personal variables, task-related variables, and strategy variables. Metacognitive experience means the use of metacognitive strategy which is a process that is used to control cognitive activity, starting from planning, monitoring, and evaluating the result of the strategy. It is known as Flavell's cognitive monitoring.

There have been several models of cognitive monitoring, such as Brown's cognitive monitoring and Tobias and Everson's cognitive montoring. Flavell's model of cognitive monitoring puts the basic theories of metacognitive, defines the components of metacognitive, and the interaction among the components. Brown's model includes a boundary between two metacognitive components, namely cognitive knowledge and cognitive regulation. Meanwhile, Tobias and Everson describe metacognitive as a compound of skill and knowledge about cognitive, cognitive monitoring and controlling. Therefore, metacognitive components are controlled into a hierarchical model where skill monitors metacognitive knowledge as a requirement to activate other skills (Mustika, 2012:54).

For that reason, metacognitive ability can be defined as one's thinking ability in processing his/her own thinking independently. This definition implies an important aspect of metacognitive which is "self-awareness". As suggested by Brown Mustika, 2012:43) one will understand certain cognitive activity when she/he can use it appropriately and be able to discuss the implementation. In a pedagogical environment "awareness" is included into the first affective domain that is receiving (accept/observe). Mastering the affective domain needs the mastery of cognitive domain, which is knowledge and comprehension. Supported by Nasution (Mustika, 2012:44) that affective learning result requires the basic of cognitive so to master affective domain it needs the mastery of cognitive. In the process of this awareness it is important to realize and comprehend how to manage thinking activity then practice it continuously. The contouous practice will become habitual activity. As suggested by Sudrajat (Mustika, 2013:182) that continuous practice will give provicient skill.

The practice in the classroom can be used as a means to develop metacognitive "awareness". In the context of learning, metacognitive ability relates with organizing and controlling the cognitive components that enable the learners to understand the task or problem then assure themselves that the task or problem has been appropriate. Learners who have the ability to manage their cognitive ability independently will be able to decide their strength and weakness where further they would settle it in the next cognitive skill.

Several researches dealing with metacognitive have been conducted especially in the field of exact science. Mustika (2012) reports that the implementation of metacognitive strategy through cooperative learning setting can improve the ability of metacognitive thinking in the field of literature. Even Curriculum 2013, which is being implemented, mentions metacognitive (Ministry of Education and Culture of the Republic of Indonesia, 2012;43). This is intended to enable learners to be independent in the process of managing their learning process. While in the previous curriculum this management was the responsibility of the teachers.

#### 2. Learners' Character Building

As a matter of fact, education is a means of character building of the learners as stated in Act No. 20 Year 2003 about National Education System. There are two keys of reference in implementing character in pedagogical field. First is Character Education Master Design (*Desain Induk Pendidikan Karakter*) established by National Ministry of Education (2010). Second is the Development of National Character and Culture Education issued by Puskur Balitbang Kemdiknas (2010). Both references are launched as the government's seriousness to create Indonesian human resources who have not only intellectual intelligence but also emotion and spiritual intelligences.

The above description emphasizes that education sector plays an important role in preparing and producing superior human resources. Superior human resources not only have good hard skills but are supported by strong soft skills. In concept like this superior human resource does not mean strengthen brain and intellectual intelligence alone but also about the exellences of characters of an individual. Considering the urgency of the characters in the world of education it is necessary to build good character at school and in college with a variety of systematic way. One way to do that is to integrate and develop character values into the learning process.

The forms of integration and the development of character values into the learning process is done by first determining the right approach to planting the character values. The practice will be related to the strategies, methods, and techniques used. There are a variety of approaches that can be used to implement a character in learning, such as: the development of a rational approach, considerations approach, values clarification approach, the approach of cognitive moral development, social behavior approach, and the traditional approach. Zubaedi (Mustika, 2012: 73). Meanwhile, the methods that can be used are the dogmatic method, deductive, inductive, and reflective. Various methods can be further developed in detail to the

technique or procedure of learning. The techniques are technique of indoctrination, technique of moral reasoning, predict the consequences techniques, technical clarification, and internalization techniques. Zubaedi (Mustika, 2012: 74). A number of approaches, methods, and techniques above can be selected and matched as needed. Related with it, there are a variety of new models of learning that is based on the character. In this paper the development of the character of the learners is done through the application of metacognitive.

Understanding of the concept of character is the main thing in the classroom prior to the implementation. The concept of character refers to two things. First, character shows how a person behaves. Secondly, the term character closely associated with "personality". A person has a noble character if she/he has knowledge of her/his potential and have awareness to do the best or superior and able to act on the potential and consciousness (Kemendikbud, 2012: 9). Basically every person has a good potential character and should be developed on an ongoing basis as well as fostered through socialization and education. In this case this is done by habituation. As presented by Lickona (2004: 7) that to get a good character, each person should do habituation in mind, in heart and in action. In addition, it she/he should have the desire to do good. Aspect of love doing good is emotional territory so it is difficult to teach. The way to do that is by raising awareness of the importance of commitment to moral values.

Furthermore, the character values that are developed include: religious, honest, tolerance, discipline, hard work, creative, independent, democratic, curiosity, a sense of pride, patriotism, respect for achievement, friendly/communicative, peace-loving, fond of reading, environmental care, social care, and responsibility (Puskur Balitbang MONE, 2010: 15). Indeed the development of character values are not limited to the formulation of the character values of Puskur Balitbang Kemdiknas, but can it be developed by teachers as needed.

The success of character education as a process of interaction between learners and educational environment must be known through evaluation of results. The forms of evaluation tools that can be used for the assessment of character are: self-evaluation by learners, assessment by friend, teacher anecdotal records, parents anecdotal notes, children activity progress notes (psychologist), teacher observation sheets, and student worksheets. The seven characters of assessment form can be selected according to interests. The process of assessment should take place continuously meaning character assessment can not be assessed at one time. Kesuma, Triatna, and Permana (Mustika, 2012: 75).

#### 3. Metacognitive Ability Empowerment as A Means of Developing Learners' Character

The initial description describes the process of education in addition to the transfer of knowledge should be the transformation tool of moral values and character development. The more educated a person should understand where the right path and where the roads diverge so that the quality of the scholar academically can be accounted for. Empowerment of the metacognitive ability by training the learners to use metacognitive strategies in the classroom is an attempt to answer the problems of education in Indonesia today. Education in question is integrated education, which not only relies on the development of cognitive competence alone but also on the cultivation of moral and spiritual values.

In addition, following are the implementation of the empowerment of metacognitive abilities in the learning process and the implications for the development of learners character. Delivered by Flavell, metacognitive abilities include metacognitive knowledge and metacognitive experiences. Metacognitive knowledge relates to individual/personal variable, tasks, and strategies. These variables affect metacognitive awareness. Knowledge of individual/personal variables includes knowledge of their own strengths and weaknesses in relation to cognition and learning. For example, learners who know that they are more adept at working on multiple choice tests rather than essay tests means to have self-knowledge about their skills in taking the test. This knowledge is helpful to prepare themseleves better in facing the next test. Implied in this section were developed character of honest and open to acknowledge their strengths and weaknesses.

Task variables related to knowledge of the nature of the task and the type of processing that must be done to complete the task. Understanding of the conditions and tasks will help learners choosing the right strategy in completing the task. Anderson and Krathwohl (2010:86) recommends some important aspects that must be considered to implement the right strategy; those are the local situational norms, general social, conventional, and cultural. This section develops the character of creative and careful. Learners creatively and carefully select the right task completion strategies.

Strategy variables related to knowledge about a number of learning and thinking strategies to solve problems. Learners who have knowledge of various learning strategies means they have learning strategies helpful to plan, monitor, and regulate their cognition. Learners' knowledge on a number of strategies delivers them to having broad thinking character. In this way learners are also trained to be responsible for the problems they face. Therefore, the character of broad thinking and responsibility are developed in this section.

Metacognitive knowledge related to cognition in general knowledge and awareness of self-cognition. Metacognitive experience is a step in the use of metacognitive strategies which is a process that a person uses to control cognitive activities, ranging from planning, monitoring, and evaluating the results of the use of these



strategies. In other words, metacognitive knowledge is limited to "know and realize" the cognitive strategies which means still conceptual, while the metacognitive experience is an application using cognitive strategies.

Self-planning includes decisions about the amount of time needed, the strategy used, how to get started, as well as rules that are used to start a task. Learners must know the learning objectives clearly, understand the steps that will be performed prior to learning, then ask self why need to do so, also make prediction about time that will be spent in learning. The character of independent is developed in this section. Learners are required to take the initiative and be able to diagnose their own learning needs.

Self-monitoring covers how to perform comprehension, speed, and adequacy of learning by setting the cognitive activity. In this section learners should be aware of how the learning activities performed. To monitor the process of cognition can be done by raising the question to self for a task like: Do I understand this task? How do I do the work? Do I work too fast? What information is important to bear in mind? By asking these questions while working on a task, the learners are trained to have a sense of responsibility to resolve the problems faced. Character of responsibility is developed in this section.

Self-assessment related to the improvement of cognition and learning activities. Learners must be aware of the learning activities being done. Learners reflect on their own learning activities. Help questions that can be used include: Have I worked well? Will I be able to do the work in a different way? These questions will help learners to evaluate themselves on their own abilities and are responsible for the actions they did. There is character of self-determination and self-responsibility.

The illustration shows the implementation of metacognitive in the classroom is potential to develop learners' character. The characteristics developed are honesty, openness, creativity, carefulness, independence, open-mindedness, and responsibility. Metacognitive implementation in the classroom is a way of building character education that meets daily activities. If this is applied continuously, it will build a routine that eventually becomes character. As supposed by Lickona (2004:3) that actions become habits and habits become character. Learners who are used to doing positive act will affect their mind patter. In other words, positive mind will lead them to behave and act in accordance with positive moral. This will be beneficial to live their lives in the future.

## C. CONCLUSION

Applying metacognitive strategy in the classroom is an effort to empower metacognitive ability. By empowering metacognitive ability, the students get used to monitor, control, and evaluate their learning outcome. These activities enable students to develop their character. Character building integrated with learning process, in addition to optimazion of national education achievement, it is also a solution of education problem in Indonesia recently. Indeed the implementation of character education is not only the responsibility of education stakeholders and its components but also family and community, the responsibility of people of Indonesia.

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