UNDERSTANDING THE ASPECTS OF LEARNING AND LEARNERS: A CONCEPTUAL ANALYSIS

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Abstract

The main focus of this research is to understand the meaning of learning and the nature of a learner. The analysis elaborates who learners are, where learners can be found, when learners and how learning happens. Besides, the article also explicates intelligence, information processing and motivation in learning. The discussion of the article explains that learning happens in any circumstances throughout human development and generates some changes in cognition and behavior. Furthermore, the learning process begins when humans face external stimuli through human interaction. The stimuli continue to be processed in the brain to activate thinking process hence it is called cognitive development. In the next discussion, we put forward that learning requires both logical-reasoning and emotional intelligence. Logical-reasoning is related to information processing in the brain. It is a process where human mind is being active when receiving, storing, and retrieving information hence new knowledge is gained after processed in human information processing system. While, emotional Intelligence is social intelligence which connects between learners' emotional, social, and cognitive wellbeing. In the last discussion, we suggest that the effectiveness of learning needs good motivation which is influenced by the internal encouragement of human behavior, expectancy-value theory, and goal setting.

Keywords: *Learning, Learner, Definition*

Abstrak

Fokus utama penelitian ini adalah untuk memahami makna belajar dan hakikat peserta didik. Analisis menguraikan siapa peserta didik, di mana peserta didik dapat ditemukan, kapan peserta didik dan bagaimana pembelajaran terjadi. Selain itu artikel ini juga menjelaskan tentang kecerdasan, pengolahan informasi dan

motivasi dalam pembelajaran. Diskusi dalam artikel ini menjelaskan bahwa pembelajaran terjadi dalam keadaan apa pun sepanjang perkembangan manusia dan menghasilkan beberapa perubahan dalam kognisi dan perilaku. Proses pembelajaran dimulai ketika manusia menghadapi rangsangan dari luar melalui interaksi manusia. Rangsangan tersebut terus diproses di otak untuk mengaktifkan proses berpikir sehingga disebut perkembangan kognitif. Pada pembahasan selanjutnya, kami mengemukakan bahwa pembelajaran membutuhkan penalaran logis dan kecerdasan emosional. Penalaran logis terkait dengan pemrosesan informasi di otak. Ini adalah proses di mana pikiran manusia sedang aktif ketika menerima, menyimpan, dan mengambil informasi sehingga pengetahuan baru diperoleh setelah diolah dalam sistem pemrosesan informasi manusia. Sedangkan kecerdasan emosional adalah kecerdasan sosial yang menghubungkan antara kesejahteraan emosional, sosial, dan kognitif peserta didik. Dalam pembahasan terakhir, kami menyarankan bahwa keefektifan pembelajaran membutuhkan motivasi yang baik yang dipengaruhi oleh dorongan internal perilaku manusia, teori nilai-harapan, dan penetapan tujuan.

Kata Kunci: *Pembelajaran, Peserta Didik, Definisi*

INTRODUCTION

Learning involves mind and psychological process. Psychologically, learning has been discussed as alterations in behavior that are produced by experience or as changes in human that result from experience (De Houwer, Barnes-Holmes, & Moors, 2013). It also involves space and time to witness the changing. As well-defined by Alexander, Schallert, & Reynolds (2009) with deep conclusion:

> Learning is a multidimensional process that results in a relatively enduring change in a person or persons, and consequently how that person or persons will perceive the world and reciprocally respond to its affordances physically, psychologically, and socially. The process of learning has as its foundation the systemic, dynamic, and interactive relation between the nature of the learner and the object of the learning as ecologically situated in a given time and place as well as over time. (p.186)

In addition, physically, learning involves brain function to process the information. Admittedly, all learning is based on neurological and biological experiences (Alexander, Schallert, & Reynolds, 2009). In other

words, learning is a cognitive development process that requires learners' multiple intelligence (Gardner, 2011) and habits and conditioning stimulus (Alexander, Schallert, & Reynolds, 2009) to improve the brain capacity to result in an effective learning process. Therefore, it needs both processes to gain a successful outcome.

In this article, we expect to contribute to the discussion about the definition of learning by bringing about an understanding of the learning aspects. This article tries to scrutinize the nature of learner by elaborating who learners are, where learners can be found, when and how learning happens. Furthermore, we argue that learning is a cognitive process that involves intelligence, information processing, and motivation.

DISCUSSION

Understanding the Aspects of Learning

Learning will always happen as long as people are still alive. To understand learning, we should know the aspects of learning. Even though there is not fixed definition of learning, we can draw some knowledge by understanding who learners are, where learners can be found, when and how learning happens.

A learning process will indicate a change in human either physically or psychologically. Churchill et al. (2013) stated that learning is demarcated as an outcome and objective which causes some aspect of change in an individual occurred. People will definitely change as time goes by regardless the age. This indicates that anyone can be a learner. People may change both physically, intellectually and emotionally. As also explained in behaviorist orientation learning rooted from John Watson's Behaviorism (the idea of all actions in living things including acting, thinking and feeling) cited in Churchill et al. (2013) argued that the key to understand learning could be found in analyzing the behavior where observable stimuli produce observable behaviors and learning is conditioned through external stimuli.

Based on this notion, people even learn before they go to school. A student is not always acknowledged as the only learner because learning start when people face external stimuli and that stimuli trigger a new behavior. It can be seen from a baby or a child when figuring out a thing. There will be a change in his or her behavior when he/she finally find something new. In addition, an individual learner involves others to be able to be stimulated for the learning process. It might be another person, groups, communities, organization, and society. However, this stimulus can only happen through interaction among people in certain place that will influence their cognitive skill as theorized by Vigostky claiming that

cognitive development is essentially a social process (Marsh, Clarke, & Pittaway, 2014).

Learning not only involves anyone but also could take place somewhere. For example in physical environment called school which is equipped with learning tools. School is thought as a real and serious place for learning. It needs teachers and students with particular pedagogy. Shulman (1992) cited in Marsh et al. (2014) proposed pedagogical content knowledge which involves three related process: 1) subject matter knowledge (deep knowledge), 2) pedagogical knowledge (how to transfer knowledge to students), 3) knowledge of context (understanding of student needs and local school environment). These three elements should be mastered by teacher to engage students deeply. Teacher should have deep knowledge, know how to transfer knowledge effectively, and know the students' capacity. Understanding this pedagogical reasoning can improve teaching and learning activity in the classroom and eventually lead to student's improvement. Moreover, learners are not only found in school, but most importantly throughout life and in all context such as in social interaction and activities. Vygotsky cited in Marsh et al. (2014) argued learning commence in the social world. It indicates that the view of learning and development is not just a process of mental sophistication, but also mediated through social and cultural interaction (Churchill, 2013). Interaction among people in society, organization, and workplace will widen perspective and share different knowledge. Furthermore, a person will easily acquire knowledge when interact with people and environment around him/her.

Since born, human is developing either physically, socially, or mentally. This development involves learning. A human learns through process and faces different challenges in each stage of life. Piaget in Marsh et al. (2014) specifically divides stages of cognitive development in human based on his/her capability absorbs knowledge. First stage is sensorimotor (0-2 years) when a child can solve simple problem. Second stage is pre-operational (2-7 years) when a child begins using symbolic and imaginative intuition. Third stage is concrete operational (7-11 years) when a child applies logical thought process. The fourth stage is formal operational (11 years above) when a human is able to make strategy and planning also has advanced-level of thinking. Meanwhile, since development in learning is not just about cognitive development, but human also develop a sense of self and identity as proposed by Erikson. Self-identity is changing as human keeps learning. Erikson (1950) in Marsh et al. (2014) argued that identity is the basis of personality development and the search for it begun from infancy to old ages. Erikson's psychosocial development suggests 8 stages which begin 0 year until 40 plus year. When each stage and crisis is passed, a person is stronger and able to face the next challenge (Marsh et al., 2014).

Learning involves senses and continued to be processed in the brain. This is when thinking process happen and called cognitive development. Piaget's theory clearly describes how learning occurs by introducing a schema. Santrock (2010) cited in Marsh et al. (2014) defined schema as a concept or framework that exist in an individual's mind to organize and interpret information. Schema is existing knowledge of a human which will be influenced and changed by a new knowledge from environment. Bandura (1976) cited in Churchill (2013) also explained how learning happens through his social learning theory. He argued that both physical and social environment influence learning. A person's behavior both influences and is influenced by personal characteristic and social environment. Bandura refers this model as *triadic reciprocality* where the three aspects shape and are shaped by social interaction which suggest individual learning.

Learning as a Process of Self-Development

Learning is a process of self-development. A better self-development process needs effective learning. The effectiveness can only be achieved by understanding the aspect of intelligence in learners, how information is processed in learning, and what might motivate learners to learn.

Intelligence determines someone's ability. To be able to know our strength in learning, a person should know how intelligent he/she is. According to McInerney (2014) intelligence is ability to acquire knowledge, think, and plan, monitor cognitive processes and to determine what is to be done. This definition explains that thinking process is a cognitive development which has something to do with our brain function. However, intelligence does not only involve our brain capacity to absorb knowledge but also our emotional development when facing challenge both in learning and problems of life. Many experts have theorized different intelligence in human being. Gardner's multiple intelligence is one of popular theories among others. He divides intelligence into 8 categories: logical-mathematical, linguistic, musical, spatial, bodily kinesthetic, interpersonal, intrapersonal, naturalist, existentialist (McInerney, 2014). By knowing that each child has his or her own intelligence, parents and teachers will easily direct the child to which ability he or she will be good at.

In addition, a new discussion about intelligence widens the perspective that intelligence is not only about logical-reasoning development but also emotional intelligence. Gardner's interpersonal and intrapersonal intelligence is consider as an emotional intelligence which is defined as the capacity to process emotional information accurately and efficiently, including the capacity to perceive, assimilate, understand and manage emotion (McInerney, 2014). Initially, this term was proposed by

Goleman (1996) claiming that Emotional Intelligence is social intelligence which connects between our emotional, social, and cognitive wellbeing. Since this is a very important aspect in learning, an educator should balance both intellectual and emotional when assess students as Zins et.al (2007) cited in Churchill et al. (2013) stating that a child's emotional development and state can play important role in academic outcome which both facilitate and hinder their learning ability. Therefore, an educator should apply appropriate approach to uncover children's strength in both academic and social life by revealing their true intelligence.

Another theory of intelligence is put forward by Sternbeg (1985, 1986, 2011) cited in McInerney (2014) called triarchic theory of intelligence. He thought that successful intelligence considering intelligence as a kind of mental self-management consisting of three basic elements: 1) analytic intelligence which is to acquire knowledge, think and plan, monitor cognitive processes and determine what to be done, 2) experiential intelligence which is how individual uses experience, insight, and creativity to solve new problems, 3) contextual intelligence which is an ability to read and adapt to context to optimize opportunity.

Intelligence might help a learner to process information when acquire new knowledge. "Information processing is a theory of learning which attempt to look inside the minds of learners to explore what happens when learning occurs (McInerney, 2014, p.58.)" It is a process where human mind is being active when receive, store, and retrieve information. New knowledge is gained after processed in human information processing system. Information processing theory is developed by many experts derived from computer models (McInerney, 2014). He elaborated that there are three memories which are working when information comes. Sensory memory will first receive stimuli through the senses. Here, the perception (interpretation of sensory information) is happening. Learning occurs after the information is processed in working memory which activates brain functions to encode the information. If the information is meaningful and involves repetition, it will be stored lastingly in long-term memory. The information which is successfully saved in the long-term memory will be easily to retrieve later (retention). This information will be activated or retrieved again when a new idea connected with ideas already stored in long term memory that is called meaningfulness. This stored information will get an attention every time the sensory memory gets input.

Another factor that contributes to effective learning is motivation. Motivation is internal stage that instigate, directs, and maintains behavior (McInerney, 2014). Even though it emanates from internal encouragement, motivation can be resulted from external factor. Corno and Rohrkemper (1985) cited in McInerney (2014) asserted that intrinsic motivation is a facility for learning that sustain the desire to learn through the development

of particular cognitive skill. Furthermore, motivation can be nurtured by expecting and valuing success. It was offered by Wigfield, Tonks & Klauda (2009) cited in McInerney (2014) called expectancy-value theory in which they argued expecting and valuing success is an important motivator and insight. A person tends to be more enthusiastic and passionate in learning if other people value their previous work. However, praising excessively is not always advantageous because it can make a learner satisfy with their hard work that might reduce his/her ability. Besides, a goal setting is very useful to boost motivation. Some experts have mentioned this goal theory. It is believed that students' purpose in learning influence the nature and quality of their motivation and engagement in learning (McInerney, 2014). Therefore, a learner should be encouraged to have clear goals in learning.

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