# MULTILITERATION MODEL BASED ON ECOPEDAGOGY APPROACH IN IMPROVING ECOLOGICAL INTELLIGENCE AND DEVELOPING CHARACTERS

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Abstract: Based on the assessment (conceptual-empirical) that has been done, the problem of the natural environment is crucial today to be tackled immediately. This is based on the reality of human living conditions stuck in the paradigm in the wrong development (Maldevelopment), which nature only sees as an object, mechanistic, fragmented, separated from man, so that it can easily be dominated and exploited. In other words, nature is considered a life object that is still exploited by people through the practice of pollution, destruction and various other bad actions. On this basis, an effort must be made to build a critical attitude and care in understanding different life phenomena that are harmful to the environment by repositioning human relationships with nature / the environment, the awareness of environmental ethics, and to increase ethics. On this basis, ecological education is needed to sharpen ecological sensitivity and to promote awareness of the existence of the environment as part of an ecosystem that influences human life. In line with this, efforts are needed to increase the ecological awareness of Indonesian teaching staff with ecological competence and character. These efforts must be preceded by the design of an appropriate and purposeful teaching model, one of which is based on the Ecopedagogy Approach.

Keywords: Multiliteration, Ecopedagogics, Ecological Intelligence, Character

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## 1. Introduction

Education is an attempt to humanize people according to their human nature as multidimensional beings, one of which has a relationship with nature or the environment. That is why education will always be closely connected with space and time, where relationships between people and the natural environment have a real place that implies the human obligation to always keep harmony, harmony and continuity with nature. (Muhaimin, 2015). This is because people are considered part of the planet Earth (Freire, 2010; Misiaszek, 2012).

In connection with the above, it is inversely proportional to the current reality. Although nature itself is recognized as value and value, but in reality, nature is considered a life object that is still being exploited by people through the practice of pollution, destruction and various other bad actions. This situation is a reflection of the low ecological awareness and the moral crisis of society. This was expressed by Machan (1989) that an environmental crisis like all crises is characterized by actions of a number of people who harm a number of other people, either through negligence or intentionality, in fact a legal moral crisis. Therefore, an effort must be made to build a critical attitude and care in understanding different life phenomena that are harmful to the environment by repositioning human relationships with nature / the environment, to raise awareness of environmental ethics and ethics.

Ecological education is needed to sharpen ecological sensitivity and promote awareness of the existence of the environment as part of an ecosystem that affects human life. In and through ecological education, all people are led to habituation of the ecological mindset, which is always aware that their existence can only mean that it exists together with other beings. This has implications for understanding how valuable and valuable nature is to human life, so it is important to maintain and preserve a harmonious and balanced life.

In connection with the above, it is inversely proportional to the current reality. Although nature itself has been recognized as having value and value, the reality is that pollution and destruction continue to take place. Problems with environmental damage have become a problem that until now is still solved on a patchwork. In other words, there have been ecological crises in different forms that have negative consequences and affect people in different aspects of life (Muhaimin, 2015).

Ecological awareness must be the most important part of educational goals. Education must be able to build educational people who have character and awareness about nature / environment and who are not focused on efforts to produce educational staff that are pragmatic-materialistic and have an impact on the development of a paradigm that is trapped in the wrong development (Maldevelopment )) that nature only sees as an object, mechanistic, fragmented, separated from man, so that they can be easily dominated and exploited.

In connection with the foregoing it can be understood that the ecological awareness is not developed through an educational process that is merely a transfer of knowledge, but rather a learning process that puts the learners as active subjects in the study. Education to build awareness and ecological intelligence is focused on the transfer of knowledge will only have students have limited knowledge of the environment, and the lack of awareness and care for the environment (Iskandar, 2015). It also reflects badly on the character of the pupils who generally do not act and behave friendly to the environment (Soemarwoto, 2001; Supriatna, 2002). This is evident with garbage bertebarannya school environment, the function switch in a urinal toilet paper, packaging and others as seen in most schools show that well-trained people do not have the competence / ecological intelligence (Muhaimin, 2015)

Building knowledge independently can be done considerably through different learning models, one of which is a Multiliterasi model. Multiliterasi is the basis of a training and learning-oriented effort to build knowledge and understanding of students to build them capable of developing skills (critical, creative, problem-solving and metacognition) based and developed through the sociocultural background (Cope and Kalantzis, 2005), This is confirmed by the judgment Ivanic (2009) stating that education a multiliterasi process challenge the students to examine and perform practical literacy, which serves as a mediation tool for studying different concepts in the curriculum. Iyer & Luke, (2010), which showed that the approach Multiliterasi students will gain a good understanding

of high. In addition, Abidin (2015) found Multiliterasi also believed to be able to develop a high degree of creativity as the most important skill for students.

In connection with the foregoing, multiliterasi is a learning model that is focused on multiliterasi ability based on the phenomenon of life there and aims to build knowledge and awareness are crucial to socio-cultural conditions. Multiliterasi is believed to be a solution in solving various problems of learning today that has lost its meaning because there are textual-partial, and not a contextual-integrative. This is in accordance with the advice-Gibney Concannon and McCarthy (2012) on the basis of his research, concluding that "multiliteracies education plays an important role in science achievement". In other words multiliterasi education is the most important factor in the achievement of science. It is certainly considered an attempt both urgent and crucial in learning circumstances at the moment is significantly deviated from the essence, namely the separation between text and context that significantly affects the loss of the meaning and value of learning from it. life deprived, as well as the impact on the low authority of the ecological and must be the low character.

## 2. Discussion

## a. Multiliteration Concept

Multiliteration can be understood as a learning that optimizes multiliteration skills in realizing better learning situations. This learning is aimed at the development and use of the four 21st-century competences, namely critical thinking, competences for conceptual understanding, cooperation and communicative competences and competencies for creative thinking. Multiliteration is also a learning approach that has been developed on the basis of awareness and recognition of the diversity and complexity of the cultural perspective of students and the diversity of learning styles that they have.

On the basis of the above, in practice it can be concluded that multiliterasi is an interdisciplinary learning concept that should be mainly applied, so that the students acquire and optimally capable of building knowledge and depth through the use of media and technology and in the background the cultural life of the students. It is based on the assumption that the pupils will acquire meaningful knowledge in learning based on a matter that lives through disciplines (interdisciplinary) and contextually appropriate cultural backgrounds of young people, with a view to the concept of the knowledge that students have intact to be determined. This is confirmed by the Judgment Ivanic (2009) stating that teaching a multiliterasi process challenge the students to examine and perform practical literacy, which serves as a mediation tool for studying different concepts in the curriculum. Iyer& Luke, (2010), which showed that the approach Multiliterasi students will gain a good understanding of high. In addition, Abidin (2015) found Multiliterasi also believed to be able to develop a high degree of creativity as the most important skill for students. This is confirmed by Concannon-Gibney and McCarthy (2012) on the basis of his research, concluding that "multiliteracies education plays an important role in science achievement". In other words multiliterasi education is the most important factor in the achievement of science.

On the basis of the above expert opinion, multiliteration can be interpreted as an educational model that builds contextual knowledge with the cultural background of life and the development of technology and information media, as an attempt to train the thinking skills of developing students for life phenomena and multi-perspective problems to deal with. In other words, multiliteration emphasizes the meaningful experience of students as a basis for constructing science effectively and efficiently.

Cope and Kalantzis (2005) state that multiliteration offers an effective and efficient learning experience. Multiliteration can also be seen as an educational model based on the use of information media and real situations through interdisciplinary learning as an attempt to optimize the potential of students. The New London Group (2005) states that multiliteration is made up of four components: practical situation, clear learning, critical framework and critical transformation. Moreover, Cope and Kalantzis (2005) stated that the four components are a whole unit that reinforces each other. Practical situations allow teachers to understand the sociocultural background of students and offer a series of lessons that are important for the formation of self-identity. Clear learning from the teacher is a given explanation or theory to help students build understanding and deep understanding. Critical

framework is used as a tool for students, so that they can work innovatively through the development of their creative, critical possibilities. Transformative practice is a way to prove the performing tasks that have been done. This practice is about critical feedback on teachers and students about the usefulness and creativity of the task (Abidin, 2015). On the basis of these four components it can be understood that multiliteration is built on the basis of constructivism and contextual approaches and is aimed at the development of the character of students, because it puts more emphasis on the process than the results. This is in line with the opinion of Lickona (2004, p. 121) that "process-oriented learning will be able to develop the character of students while developing the academic skills of students."

On the basis of expert advice above, Multiliterasi can be seen as an educational model that is not only aimed at achieving the knowledge per se, but more of the process or activity that is capable of meeting the potential and all aspects of self- pupils who have the possibility to think highly involve the development of (critical, creative and metacognition) and other possibilities and to develop the character of the pupils through a multimedia approach, multi-series and multicultural.

Based on the above, in relation, Multiliterasi in this study is the application of concepts that contextualize the situation in Indonesia that diversity in the different aspects of the constellation of life, one of which is the cultural diversity, and thus the development of a model multiliterasi this is not a concept that was adopted in the raw without having their contextualisasi of dimensions in it was developed in the framework of Indian-ness.

### b. Ecopagogic concept

In a philosophical perspective People are multidimensional, of which one with the connection to nature or the environment, so that human development in the educational process is not separated from nature, and always closely connected with space and time when the relationship between people and environment is given its place in real terms (Yunansah, &Herlambang, 2017). In practice this means the human obligation to always maintain harmony, harmony and continuity with nature (Iskandar, 2015). This is because people are considered part of the planet earth (Freire, 2010; Misiaszek, 2012). This is inversely proportional to the current reality. Although in principle nature has itself acknowledged value and worth, but in reality nature is considered the purpose of life still being exploited by man through the practice of pollution, vandalism and various other bad deeds. This state is a reflection of the low ecological awareness of the community. On this basis, ecological education is urgently needed to reflect critically on these circumstances. For example, ecological education can promote a meaningful awareness of ecological literacy (Kahn in Okur&Berberoglu, 2015).

On this basis it can be understood that ecological education is aimed at sharpening ecological sensitivity and promoting awareness of the existence of the environment as part of an ecosystem that influences human life. In and through ecological education, everyone was led to the mentality of habituation ecologically always aware that his presence could only mean that he is with his creation. This has implications for understanding how valuable and valuable nature is to human life, so how important it is to maintain and preserve a harmonious and balanced life.

Ecological awareness must be the most important part of educational goals. Education must be able to build beings education has character and awareness of nature / environment and not directed in an attempt to give birth to creatures education-minded pragmatic materialist, and the impact on the establishment of a paradigm that is stuck in the jungle highway construction erroneous (developmental disorders), which only see nature as an object, mechanistic, fragmented, isolated from man so easily dominated and exploited.

In connection with the above, it can be understood that in ecological awareness is not built up through an educational process that is merely a transfer of knowledge, but a learning process that teaches students as active subjects. Education to build awareness and ecological intelligence is focused on the transfer of knowledge will only have students have limited knowledge of the environment, and the lack of awareness and care for the environment (Iskandar, 2015). Even this has a negative effect on the character of students who generally do not behave in a friendly manner and who are not friendly towards the environment (Soemarwoto, 2001; Supriatna, 2002). This is evident with

garbage bertebarannya school environment, the function switch in a urinal toilet paper, packaging and others as seen in most schools show that well-trained people do not have the competence / ecological intelligence (Muhaimin, 2015).

Ecopedagogics can be interpreted as an academic movement to make students aware of a person who has understanding, awareness and life skills in harmony with the interests of nature conservation (Khan, 2010). In another sense (Gadoti, 2010) argues that ecopaedagogics is an approach to learning that enables students as independent, autonomous learners to develop learning potential based on experiences that come from outside the classroom and who realize that every action has an impact on themselves and their environment. As a learning approach, ecopedagogics are supported by critical-critical and pedagogical theories (Supriatna, 2016). That is why ecopsychology-based education can build up critical awareness and develop the character of students to understand its nature as a person who has relationships with nature and that manifests consciousness through sensible behavior towards nature.

Etymologically the term ekopedagogik (ecopedagogy) is derived from two words: ecology (ecology), which involves the study of the mutual relationships between living beings and their environment, and pedagogy (pedagogy), the science of education, both theoretical and practical the philosophical values. Based on her assessment, it can be understood, that ekopedagogik is an approach to building ecological awareness, based on a critical reflection on the conditions of life that are not in line with expectations, to build a future for a better life. In other words, ekopedagogi empower pupils to contribute to a better future through a change of mentality, critical reflection, and the development of new skills (Reynolds, 2009; Kahn, 2008, 2010). In this context, ekopedagogik is a movement that is focused on the future "a strong appreciation for the collective human potential to develop and promote social justice around the world are expected to be born will make the public aware of critical (critical environment literacy) ekoliterasi. This correlates with the advice Surpriantna (2015) have observed that ekopedagogik movement back to nature again dig the properties of that heritage of conservation of nature.

In a more operational perspective, Surata (2010) defines ecopsychology as a form of learning based on love, participation and creativity. Ecopagogic discusses three main areas. First, to understand the technical ekoliterasi (functional) to the basis of science, the concept of ecology and biology, as well as the positive and negative effects of man on ecological systems. Both cultural ecoliteracy to improve understanding, awareness and understanding of different cultural perspectives in the relationship between people and the environment that results in the sustainability of life. Thirdly, critical echoliteration to involve educational topics in ecological politics, technological progress and communication through a critical and constructive dialogue. There are various references used in the development of teaching materials. First, using the three pillars ekopedagogi (concept of flexibility ecological-social, literary culture, and the use of technology is critical and creative (Kahn, 2008; 2010.) Second, the establishment of a balance between the ability to to think (head), being (heart), and to act (hand) thirdly, to encourage learning as a social process to encourage the social skills of students interacting both in the classroom and outside the classroom. which leads to achieving the academic competence at a higher level according to the taxonomy of Bloom.

Ecopedagogics is not limited to cognitive aspects, but includes various challenges, behaviors, attitudes, perspectives, concerns and the ability to feel connected to the human community (Gadotti 2008; Kostoulas-Makrakis 2010). The eoprologic enables students to contribute to a better future through changing ways of thinking, critical reflection and building new skills (Reynolds 2009, Kahn 2008, 2010).

Ectopagogics are essential things that must be studied and understood, because ecopsychology is one of the critical problems in critical pedagogical and pedagogical transformations (Herlambang, 2018). By studying orthopedics, we introduce that education not only teaches students with the human environment, but that we also get to know a broader environment. E-education has been developed in different countries in the global dimension, as a form of mutual care in the global community (Gyallay, in Muhaimin 2014).

It is necessary for e-education to make all parties aware of human exploitation of nature and the exploitation of other groups that have power over other groups. Therefore, ecopaedagogy as a learning approach supported by critical and pedagogical theories requires the existence of a learning process that enables students to commit to political, economic, cultural and major ideologies, including the social environment therein. This is in line with the opinion of Tsegay&Maekelea (2016), which shows that "As a critical approach, ecopedagogy enables to educate people connecting environmental and social problems". On this basis, ecopaedagogics focuses on multi-perspective ecological awareness as an attempt to build wisdom on the dimensions of human life. In a more extensive review, Gadotti, 2008) reveals that:

"The fundamentals of the eco-pedagogy include protection of nature (natural ecology), the impact of the human societies upon nature (social ecology) as well as the influence over civilization and economic, social and cultural composition (integrated ecology) therefore, essentially it promotes respect for nature, human, culture and diversity." (Gaddoti, 2008).

Ecopedagogic is a life project which aims to realize the ideals of the new ecology-sustainable civilization, so that children and young people can make it happen with the help of educators and people in the vicinity (Gaddoti, 2002). By prioritizing the ecopedagogical paradigm, humans do not see themselves as masters and rulers of the earth, but both are part of nature. In other words, humans are an integral part that cannot be separated from and united with nature. In other terms it is said that "Human beings are considered part of the planet" (Freire, 2005; Misiaszek, 2012), meaning that the ecopagogic unites human rights and natural rights (Gadotti, 2010).

In addition, the aim of ecopaedagogics is to create a global community that is concerned about the environment and its problems and that has the knowledge, motivation, dedication and skills to work, both individually and collectively, in finding alternatives or providing solutions to existing environment problems and preventing the emergence of new environmental problems (UNESCO, 1997). In connection with the above (Gyallay, in Muhaimin 2014). Reveal that the objectives of elearning are: (1) to help explain the problem of concern and concern about the interrelationships between economics, social, political and environmental issues in cities and rural areas; (2) Give everyone opportunities to develop knowledge, values, attitudes, commitments and abilities necessary to protect and improve the environment, and (3) to create new behavioral patterns in individuals, groups and society as a whole in the direction of environment. The objectives to be achieved include aspects of knowledge, attitudes, worries, skills; and participation.

Based on the above, it can be understood that the purpose of the e-learning is to build collective awareness to play an active role in maintaining and caring for the planet Earth, because nature is a space for giving and meaningful life (lebenstraum), and not just as an environment. Moreover, ecopaedagogics is education that can change the paradigm of science that is understood only as something that is mechanistic, reductionistic, partial and value-free to be ecological, holistic and value-bound, so that wisdom can grow. In addition, Ecopedagogics is also a training to recognize nature, so that a growing sense of love / respect for nature and its content is created.

Based on the above, it can be concluded that the goal of e-learning is to develop literacy about the environment (environmental literacy). With environmental friendliness we have a sense of responsibility to maintain and maintain it. This was confirmed by Turner, 2011) which showed that "some of the objectives of education-based environmental education contribute to improving favorite environmental attitudes and awareness, raise the environmental knowledge level, have a holistic approach to nature".

### 3. Conclusion

Based on the reality that exists today, although in fact nature itself has been recognized as value and value, nature is in reality considered as a life object that is still being exploited by people through the practice of pollution, destruction and various other bad actions. This condition is a reflection of the low awareness of the ecological and moral crisis of society towards the environment. Therefore, the need for effective and strategic efforts in education, one of which is through the application of the model-based multiliterasiekopedagogik. A multiliteration model based on ecopaedagogics is a

learning concept that is not only a transfer of knowledge or is aimed at achieving knowledge, but more than that is a learning concept that places students as active subjects in learning or activities that are capable of potentially and all develop aspects in self-learners that include high thinking skills (critical, creative and metacognition) and other possibilities and to develop the character of the pupils through a multimedia approach, multi-series and multicultural. In practicable, this model is applied through philosophical and contextual based learning, which aims to develop a critical awareness and the development of character pupils to the essence as human beings who have a relationship with nature and consciousness manifest through understand sensible behavior towards nature. In other words Multiliterasi Model-pedagogy-based learning is a concept that can promote awareness of the environment (environmental literacy).

A multiliteration model based on ecopaedagogics is a learning concept that focuses on efforts to develop the ecological intelligence and character of students. This is nothing other than an essential objective that is essential in education. That is why a multiliteration model based on several stages is one of the learning models that is believed to be effective for efforts to build environmental literacy, especially in the context of basic education. Moreover, this model is not a rigid and static model, but a model that can be developed on the basis of the expected target orientation. On this basis, this can hopefully be an inspiration for all parties, especially for educational professionals to think, to explore, to work out and to create an innovation for the development of advanced learning models that are relevant to the times and are aimed at creating critical awareness education people. against the phenomenon of life in multidimensional.

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