Constructing Meaning in Learning Containing the Living Environment

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ABSTRACT
This research aims to describe the teacher's explanation in constructing the meaning of learning containing the living environment in Indonesia. This research uses descriptive explanatory method. The research was conducted by observing and analyzing classroom learning discourse in elementary schools labeled Adiwiyata or school whose learning is related to the living environment education. The results of the study show that the teacher's explanation contains an explanation of the object, concepts, and procedures; the explanatory strategy used by the teacher is a knowledge-transforming with a reference to the social and cultural context of the society that consists of (1) religiosity (2) dependence between humans and the environment, (3) human values to preserve nature, (4) social and cultural ethics as basic human characteristics. Verbal or linguistic strategies show the teacher's awareness in using language with metaphors and expressions to motivate. Through a verbal strategy it is known that the teacher's explanation is done efferently and aesthetically. The teacher's explanation constructs the meaning of descriptive and procedural knowledge. Descriptive knowledge is knowledge that makes the learner knows or understands. Procedural knowledge makes the learner is able to. The role of teacher explanation is supported by the government's active role in environmental sustainability programs.

INTRODUCTION
The adiwiyata school curriculum in Indonesia is a curriculum containing the living environment education. This is needed to teach the younger generation about wise living in facing the environment, such as waste management, tree planting, and
other efforts to save the ecosystem on earth. Living Environment education is a subject that cannot stand alone, but is integrated into subjects such as Social Sciences, Science, Language, History, and many more. Adiwiyata School means schools that have focused fully on environmental education with a green and healthy school atmosphere. In adiwiyata school students learn how to plant trees, maintain the ecosystem, and recycle waste naturally. Adiwiyata School is a school that is trusted to integrate environmental education in learning materials. Teachers are demanded professionally to have environmental literacy. In environmental content learning besides literacy, the ability to construct the meaning of learning is also needed, constructing the meaning in this case is making a connection between learning material and environmental education.

Teachers in adiwiyata schools are required to have the ability to construct the meaning of learning by linking material to environmental education. Basically, there is a common understanding between EE and education that contains environmental. The difference, in the implementation. In education with environmental contents, environmental material is integrated into learning material, not separate material. In Indonesia, there are also environmental education in elementary school that stands alone as a subject. In learning education in the context of the environment, the teacher must be able to construct the full meaning between matter and EE.

The definition of environmental education (EE) is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture, and his biophysical surroundings. Environmental education also entails practice in decision-making and self-formulation of a code of behavior about issues concerning environmental quality.

From the definition above, it is known the essence of education in environmental and environmental education. What needs to be considered from both is the same goal. The goals of EE and education containing the living environment are awareness of the environment, knowledge of social groups and individuals to overcome environmental problems, attitudes with motivation to protect and preserve the environment, skills in dealing with environmental problems, and participation in resolution of environmental issues [1]. To achieve these goals the role of the teacher is needed in the learning process. through optimal explanations, students will easily construct meaning and have literacy to protect and save the environment.

Ethnographic investigation research reports that through domain analysis, a theme emerges: Children's non-formal environmental-learning experience is negotiated through the feeling of having choices and enhanced through sensory perception and personal relationships. Explicit recognition of the importance of informal social interactions, unstructured time and play, and perception of choice has potential to enhance the meaningfulness of residential EE programs [2]. The research shows that the learning context naturally needs students. through the introduction of the environment directly in the game and unstructured social interactions will provide meaning in EE. The environmental context in the form of natural and social phenomena strongly supports constructing the meaning of learning. Therefore, the teacher must have experience and knowledge from the real-life context around students in making a connection between material and EE.

The role of the teacher is very large in learning containing the living environment. In learning containing the living environment, the teacher must be able to connect social
conditions, nature, and all ecological components to realize the importance of saving and preserving the environment. Research on the preservice teachers reports that teachers do not have environmental literacy as reported by the North American Association for Environmental Education (NAAEE). Using the data in their study, the authors suggest that, contrary to popular assumptions, neither ethnicity nor dominant residential experience had a significant influence on participants' perceptions of the environment [3]. These conditions need to be considered to improve the quality of learning. In connection with the research, adiwiyata school teachers must meet the NAEE criteria. Observation of adiwiyata school teachers and the learning process that supports the following can be a guide to teaching environmental literacy.

In Indonesia, environmental education has been linked to environmental literacy since Elementary School. Responding to the challenges of the industrial revolution era 4.0, interaction and ecological communication have been applied in all aspects of learning material to support environmental and social saving processes. In economic subjects, students must be able to calculate production costs including the costs of managing factory waste and the financial benefits and sustainability of the company's ecology. Primary school students from first grade must understand the meaning of environmental sustainability by planting trees and recycling used drinking water cans as a place to grow plants, and turning them into items of economic value. Students must be able to understand environmental peculiarities: strengths and weaknesses, disaster management, and social caring attitudes. In grades 4 to 6, elementary students have been actively involved in efforts to save the environment, for example by actively releasing hatchlings as activities supported by the local government. This was observed in schools in East Java Province. In Sumatera and Kalimantan, elementary school students were active in waste management activities to avoid the smoke disaster that had occurred and spread to other countries a few years ago. In education in the context of the environment, learning from real situations is essential to support the role of teacher explanation. Constructing meaning related to high-order thinking as an ability of thinking critically, creatively, the ability of arguing, discussing, making decision and solving problems [4]. Teacher efforts are seen as action to develop thinking skill.

To support this, an explanation of the teacher is needed which professionally constructs the meaning of EE integration in the learning material. Education containing the living environment is an effective way to contextualize environmental reality with theories or concepts of learning material. Thus, EE can be applied by students in real situations. The teacher must have the right perception about EE and its relation to the material so that it is able to arrange the learning design well.

In the exposition phase, Teacher language awareness (TLA) must be possessed by the teacher to construct a way of thinking. TLA relates to the teacher's knowledge of the material and its delivery construct in effective speech. Teacher awareness in using language is related to the success of planting knowledge and values [5]. Language awareness is related to explanatory strategies that must include elements of clarity, structure, length, language, attention, exemplary, and understanding [6]. These seven things must be considered to improve the effectiveness of explanations for education in environmental context.

Primary school teachers must understand the age of student development and modify language in their explanations. Speech modification is done relating to class content and registers. In addition, these modifications are related to the ideology that the teacher understands in shaping understanding of the material to students. Therefore,
teacher confidence is very influential in constructing meaning [7]. The use of teacher language shows a variety of social life around it, the language used by the teacher reflects the construct of knowledge that is built, classroom is a universe of language [8]. In addition, the teacher can explain the material in everyday language. The teacher speech features deals with the use of language in terms of modifying language [9];[10]; [7]; [11]; 12.

Modifications that move the nature of scientific language to language every day. Argumentative nature is a form of formation of scientific organizations from nominal and taxonomic relations [12]. Thus, what needs to be considered is the substance of the explanation and communication strategy. The substance of the explanation relates to the understanding and experience of the teacher, including their beliefs and ideologies about the environment. Strategies relate to the application of learning approaches (pedagogy) and the delivery of explanations from the language aspects (verbal).

In the teacher's explanation, language is seen as the conveyer of ideas. In that case, language has three main functions, namely ideational which consists of experiential and logical, interpersonal, and textual. All three produce metaphysical meanings. Ideational metaphors: experimental metaphors express an experiential meaning which is a form or reality of experience; logical metaphors realize logical logic as a result of logical reality between experiences. Interpersonal metaphors are derived from social relationships between participants in them which produce interactional and transactional meanings. Textual metaphorical realizes meaning which is a combination of ideational and interpersonal metaphors [13]. In the strategy of delivering ideas as production of discourse, teacher explanations can be done with knowledge-telling and knowledge-transforming [14]. Teachers in environmental learning try to make their speech use knowledge-transforming. In transforming knowledge there are efforts to utilize various referents to enrich the explanation and help students construct meaning. The teacher's explanation is a representation of the language's referential functions. Darstellungsfunktion emphasizes the object described [15]. Objective explanation of the teacher must be able to reveal how the object in the form of the material described can be conveyed well.

The purpose of learning containing environmental is to construct the meaning of environmental distinctiveness and involve students in real situations in the activity of saving the environment. Efforts to construct these meanings need to be observed to be a guide in improving the quality of the learning process. For example, in language learning, students can formulate the concept of preserving the marine environment from reading material in structured sentences and understand the metaphor of the polemic of damage to nature. Thus, sensitivity will be created about the surrounding environment. Through poetry about the environment, students will have the ability to express themselves in understanding the environment and improving the psychological aspects of the environment. The following will describe the description of the teacher's explanation and learning activities in education in the context of the environment in Indonesia and its role in constructing meaning. In science learning, students not only learn about the concept of ecosystems, but also learn and play an active role in improving ecosystems and environmental preservation.

An investigation report the results of research conducted at the urban institution. The results of the study indicate that learning in real situations is the most effective strategy in all levels, students in making connections (making connection) between
Making connection is the right way to construct meaning in both descriptive and procedural knowledge. Descriptive knowledge is knowledge that makes the learner knows or understands. Procedural knowledge makes the learner is able to. In understanding the definition and concept of the environment, students learn about descriptive knowledge. In solving problems by doing something, students learn about procedural knowledge [17]. The following table explains the differences in descriptive and procedural knowledge.

| Declarative Knowledge | Procedural Knowledge |
|----------------------|----------------------|
| The learner *knows or understands* | The learner *is able to* |
| Does not require the learner to perform a series of steps with the mind or body. This kind of information is information that the learner must know or understand. | mental or physical when the students perform actions go through a series of steps. |
| information—facts, concepts, and generalizations—within content knowledge | The case even with complex processes like writing, reading a bar graph, and setting up an experiment. Although the sequence of steps is not always linear, there are steps that we must perform in the skills and processes |

From the table it will be known that the types of teacher testing are used to support which knowledge, descriptive or procedural based on the context of speech. Knowing the type of knowledge students need will help the teacher manage the explanation. The construction of meaningful learning presented by Ausubel is relevant to efforts to construct meaning. This study views efforts to construct meaning as a process of finding relationships between materials. Constructing meaning is a deep learning effort. Krathwohl's states four distinct areas of knowledge involved in deep learning: factual, conceptual, procedural and metacognitive [18]. The teacher has a big role in realizing deep learning. Explanation of teachers and support activities in real situations embody deep learning.

**METHODOLOGY**

This research is a descriptive study that describes the teacher's actions in explaining material. This study describes the conditions of education in environmental context and the real conditions that teachers make in constructing meaning through explanations and learning strategies.

Primary School Education in Indonesia is a system that emphasizes knowledge and cultivate of positive characters. One of the developing districts and concerned with environmental education is conducted on teachers in Banyuwangi, East Java. The Banyuwangi community uses Indonesian language after Osing, Java, or Madura. This research was conducted in three schools in three teachers for each school. Therefore, teacher talk is needed that can overcome the problem of understanding material in the second language. Explanation of the teacher must be able to construct meaning about the material as well as about the environment.
Data is taken by recording video. This study uses primary sampling and intensity selection. To collect data, I adopted the approach, the observer who did not participate. Data from the teacher's statement in explaining the concepts of knowledge and values to students in the exposition phase. Data were obtained from 27 discourse on learning process from 9 teachers in three adiwiyata elementary schools. The explanation of the teacher studied was a statement in integrating material with environmental education. This statement can be in the form of sentences and sentences in the context of a full theme. Before being sorted out, the data is transcribed. The data presented in this article is one of the data that represents the characteristics of the statement spoken by the teacher.

This research is a field of discourse analysis with a speech act approach. This study uses interpretations that consider the context and its features [19]. The context plays a role in determining the meaning of speech [20]. In general, data analysis in this study was conducted by data collection, data reduction, data presentation, and conclusion [21]. Data analysis in this study was conducted with the activity of organizing data: grouping by categories, themes, and patterns of answers; looking for alternative explanations for data; and write research results [22]. After data is organized, data analysis is carried out. Explanation of the teacher will be analyzed from the substance and learning strategies specifically in environmental education. In addition, researchers also observed and clarified teachers and educational institutions to strengthen the meaning of research.

RESULT AND DISCUSSION

The results of the study show the teacher's explanation which contains the substance and strategy in constructing meaning. In the explanatory substance, the component constructs meaning consists of the involvement of elements of experience, knowledge, and social interaction. In terms of strategy, there are strategies related to efforts to involve the real context, and verbal strategies in the form of the use of language specifically carried out by the teacher to construct meaning. From observational activities, actions can be found that extensively support education in the environment.

Constructing meaning is done by involving various experiences, knowledge, and life of social interaction. Thus, the teacher's explanation reflects all three and vice versa. In the teacher's explanation it will be known the meaning construction that is being sought by the teacher in the learning process.

There is the substance of the teacher's explanation in the form of explanations of objects, concepts, and processes. In these three things the teacher attempts to construct meaning by connecting material with environmental education. Explanation of objects can be observed in the following data.

Teacher: to facilitate life, a sloping field is needed. What is the inclined plane? The incline is basically a way of working to fight inclines. In high mountain areas, there are winding roads so that we can pass with little energy. Port workers lowering goods from trucks with sloping boards will make it easier to walk from the truck down. God has given us instructions to solve natural problems. Therefore, be grateful for the nature that we have.

Context: The teacher explains the object of the inclined plane in science and relates it to the environment and the context of life of the local community.
In these data, it can be seen the substance of the object's explanation that the teacher performed can be described below.

**Figure 1.** Explanation of Objects in Environmental Education

Explanation of the teacher is done by exposure to what the object is, where we can see it around us, what role it plays in our lives, how we behave after understanding it. Thus, the construction of meaning built by the teacher keeps nature as a form of gratitude to God who has provided the ability to survive.

In the explanation of the concept, the teacher associates the concept with the context and makes analogies contained in environmental events to construct the meanings contained in the material.

*Teacher:* One of the principles of mutual cooperation in our culture is to help. There is reciprocity. In all aspects of life there is cooperation and reciprocity. Without feeling, there is reciprocity between humans and the environment. If plants need $CO_2$ from respiration to photosynthesize, humans need $O_2$ from plants for respiration.

*Context:* The teacher explains the principle of mutual cooperation or cooperation as one of the cultures of social interaction in Indonesia.

From the explanation above, it can be seen that the explanation of the concept is carried out with an explanation of social life that is associated with natural life and constructs equality between the two concepts.

**Figure 2.** Explanation about Concepts in Learning Containing the Living Environmental
Explanation directs students to construct meaning that cooperation occurs in all activities of life. In the collaboration there is a reciprocal step. The teacher's explanation of the EE contained learning attempts to link the concept with events in nature and the social environment to construct the concept equation. By understanding the concept of cooperation in social life, students understand natural life and give meaning to the need to protect the environment.

In explaining procedures, the teacher attempts to understand conceptual procedures and operational procedures, for example, in the operational procedures of household business learning in the theme of technology and communication, the teacher explains the role of technology and communication in social life and relates it to efforts to preserve the environment.

Teacher: Advanced communication tools can be used for positive and negative purposes. Through various information in the mass media, we can find out various places. Togetherness in social interaction is very necessary. We are not usually busy with communication tools when we are together somewhere. How should it be? Keep caring about what we have. Save communication devices such as our mobile phones when with parents or siblings. The key is the word caring. Caring for others, caring for the social, and caring for the environment. In fact, care about garbage. The more we do not care about the environment, the environment will not care. Dispose of litter, make the environment angry and one day there will be a flood of garbage.

Context: The teacher explains procedurally attitudes in dealing with the progress of communication tools that need to be done with a caring attitude.

The teacher's explanation of the phenomenon of the use of communication tools explains how the phenomenon occurs, explains the problem, provides a solution with a caring attitude, and ends with the inference of attitude toward the environment both in the social environment and the natural environment. From the substance explanation of objects, concepts, and procedures, referential functions appear in the teacher's speech.
In the teacher's explanation strategy, there are two things that need to be described, namely a general learning strategy and a verbal strategy. Learning strategies in general in learning to contribute to the environment are carried out by relating local contexts. The teacher uses various references. The reference used is knowledge about human dependence on nature and the context of social cultural life. Explanation of teachers can be done with a knowledge transforming. Knowledge-telling is avoided by teachers in environmental-friendly learning because it does not support the involvement of referents. Knowledge-transforming is done by involving teacher knowledge and experience. In the explanation of micro-enterprises that use plastic packaging, the teacher explains inorganic waste management and experiences about people's attitudes in the environment that throw garbage into rivers around the school. This attitude is associated with social ethics related to local characters taught in culture.

The reference used by the teacher is trust in God that will reward because of the good attitude of humans to the environment. The teacher uses his belief in religion in persuading students about the environment. The results of the observations indicate that the attitude of religiosity is applied in education because one of the competency standards of Indonesian education is religious attitudes related to the purpose of character learning.

Learning strategies in environmental education are active involvement of students in environmental preservation actions [16]. Students in adiwiyata schools take action in real situations by being actively involved in efforts to save marine ecosystems, one of which is by releasing hatchlings as shown in the following photo:

In Indonesia, turtles are endangered species that are endangered. In Banyuwangi, turtles begin to be hunted and their eggs taken wildly. One of the activities carried out...
was the release of hatchlings carried out by elementary school students on the coast of Banyuwangi.

In the release students use traditional clothing to increase love for culture. The release of the turtle is an effort to construct the meaning of preserving by allowing free animals to live in their habitat and to realize the basic human character in accordance with the local culture is to love and care for the nature shown by wearing traditional clothes when releasing hatchlings. Grade 1 students to grade 4 began to be active in recycling plastic bottles by planting trees. In addition, teachers also play a role in improving the green situation in class and school. Learning in real situations is part of experiential learning (learning by doing). A research reported that experiential learning supports the formation of new knowledge, new skills, and new ways of thinking. Through experience in real situations students will construct the meaning of science learning in saving the environment, language materials in motivating and arguing for protecting the environment [23]. Verbal strategies carried out by teachers are related to efforts to increase sensitivity to natural events. For example, to construct the meaning of the Indonesian situation with smoke events due to forest fires in Sumatra and Kalimantan, teachers use metaphors for exporting garbage. With this metaphor, students understand the crucial problem of smoke because it has spread to neighboring countries. Therefore the word exporter is used. In addition, the agitative statement is used by the teacher in motivating students with conscience, the teacher states that those who have a conscience, of course will water the flowers without being told and not littering. With the choice of words, the teacher attempts to construct the meaning that maintaining the environment is a form of humanity.

In the verbal strategy, the teacher's explanation is supported by a narrative about the environment, in the form of a greedy story about felling trees which results in flooding, illustrating the anger of the forest guard in the mythical story about forest humans. The teacher's argument is based on facts obtained from experience, knowledge, and social interaction. To construct the meaning of preserving the sea, developing with the facts: humans are weak without sea products because eating without sea fish makes it tasteless (a characteristic of Banyuwangi people), the level of marine pollution can damage ecosystems (knowledge), low public awareness about marine preservation and cleanliness (social interactions). Based on these three things the teacher constructs the meaning of humans needing to maintain sea harmony immediately because our daily needs to fulfill the living needs of the sea while on the other hand marine preservation is threatened because of human bad attitudes towards sea stability and cleanliness.

CONCLUSION

Explanation of the teacher in constructing meaning can be observed from the explanation substance conveyed by the teacher. There are three explanatory substances, namely, explanation of objects, concepts, and procedures. The three substances are identification of referential functions in class discourse. This supports the opinion of Bühler. In education the environment, objects, concepts, and procedures are explained by the teacher with language awareness. The key is the coherence of teacher statements between material and EE integration. In thematic learning and organizational issues, integration of learning materials and material integration with EE is needed.

The object's explanation substance is indicated by language modification in the form of exposures of form and function. This modification is a form of paraphrase that
makes it easy for students to understand the construction of meaning. Likewise in the explanation of the concept, the teacher builds inter-life relevance to construct the full meaning of the work depicted in the Indonesian culture of mutual cooperation. Explanation of procedures related to the solution of the problems experienced by the teacher. This is according to the research about the concept of mutual cooperation, students have the attitude of working together, through the integration of teacher explanations, students have a negotiating attitude towards protecting the environment because of natural mutualism.

Table 2. Substance of Teacher's Explanation to Construct Meaning

| Explanatory substance | Speech elements              | Learning Elements                        | Reference                              | Meaning Construction                                                                 |
|-----------------------|------------------------------|------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------|
| Object                | The form of things           | Definition of the function of the object | Real phenomenon religiosity            | Humans must protect the environment as a form of gratitude to God                    |
|                       |                              | Real context attitude / character building|                                        |                                                                                      |
| Concept               | Principles and meaningfulness| • Analogy                                | The context of social life and natural phenomena around students | The need to protect nature as an effort to maintain human balance and dependence on nature |
|                       |                              | • Generalization                         |                                        |                                                                                      |
|                       |                              | • Comparison                             |                                        |                                                                                      |
|                       |                              | • Inference                              |                                        |                                                                                      |
|                       |                              | • Making connection                      |                                        |                                                                                      |
| Procedure             | How it works and its stages  | Procedural knowledge                     | Social and environmental issues        | A positive attitude with care for the environment by maintaining sustainability and creatively finding solutions to problems |
|                       |                              | Skills to take action according to the concept or procedure |                                        |                                                                                      |
concepts. Therefore, object substance and concepts are needed to support procedural substance. It should also be understood that the teacher's explanation not only relates to the context of occurrence of speech, but also to the representation of the teacher in the social context, the context of interaction, and personal agents [25]. These two views indicate that in the teacher's explanation there is always a background context involved, including personal experience. The teacher's job is to optimize his experience and knowledge so that his efforts to construct meaning and support student creativity are fulfilled.

Explanation strategies in the form of knowledge transforming in this study conducted by interactional adjustments in the context of public belief, namely the attitude of religiosity and social and cultural ethics about living in harmony with others and nature. Knowledge-transforming in constructing meaning is formed by coherent efforts between material and EE. Thus, the function of language as the conveyer of ideas plays a role in constructing meaning by involving experience, knowledge, and the results of the social interaction experienced by the teacher [13]. Halliday (1994). Observing the three components, the teachers at Adiwiyata schools have relatively good environmental literacy. This is different from the observations before because they observed the preservice teachers [3].

Verbal strategies show an effort to use language to show the gravity of the state of nature and the motivation to love the environment. Argumentatively, the teacher's explanation utilizes students' understanding of humanity, human weakness, understanding of characters from social interaction. The teacher's understanding of the age of development is carried out through illustrations and narratives originating from the natural story as a form of contextualization. Thus, teacher-language awareness shows real or efferent and aesthetic understanding.

**Table 3. Communication Strategy by Knowledge-Transforming and Verbal Strategy**

| Communication Strategy by Knowledge-transforming as ex | Verbal Strategy |
|--------------------------------------------------------|-----------------|
| Using various references to fulfill the principle of clarity in constructing meaning | Environmental issues in Indonesia | Metaphor from the mass media about environmental problems |
| Implement learning in real situations or concrete actions as environmental sustainability solutions | Solution to environmental problems | Expressions about human feelings to care for, preserve, and preserve the environment |
| Conveying ideology and beliefs in accordance with social and cultural ethics of society | |

In education containing living environment, the essential requirement thing for the achievement of learning objectives is the construction of strong meanings about
learning material and EE. The teacher constructs environmental meanings through environmental literacy and language literacy in explaining. The substance of the teacher's explanation is the explanation of objects, concepts, and conceptual and operational procedures. The three aims to build awareness of attitudes towards the environment. The referents of the thinking paradigm used are (1) religiosity in the form of thanking God's gift by preserving the environment and reward from God for being kind by loving nature (2) interdependence between humans and the environment, (3) disrupting human life if not maintaining a social environment and the natural environment, (4) human values to preserve nature, (5) social and cultural ethics as basic human characteristics. In learning in the context of the environment, constructing means preserving the environment is a continuous action and reflects activities that can be done in everyday life.

To construct meaning, knowledge-transforming teacher explanations are carried out with an awareness of social and cultural ethics and real activities as the best learning media. The real activity is a solution to the environmental problems in Banyuwangi. In addition, real activities involving the government show support from the local government for education in the context of the environment. To construct meaning from the verbal aspect, it takes two sides, namely the efferent or understanding of factual and aesthetic knowledge, namely understanding emotions, the age of development, and the tendency of student choice in negotiating. In fact, understanding natural events in the mass media is an important little thing in constructing meaning in environmental education. Thus, to construct meaning, teachers need to update information with sensitivity to the use of language to support verbal strategies. The meaning of environmental ethics from the aspect of culture and the context of people's lives is very necessary to determine the reference explanation.

This research shows that the explanations of teachers in environmental education in Indonesia support environmental literacy, pay attention to social and cultural contexts, link the context of environmental problems and their solutions.

In constructing meaning, the teacher builds knowledge both descriptive and procedural. In the substance of the object explanation and the concept of the teacher build descriptive knowledge. In the substance of the procedure, the teacher builds procedural knowledge. In addition, learning strategies in real situations, as described in the photo above, support procedural knowledge. To construct meaning in learning in the context of the environment, students need these two knowledges in a balanced manner. In fact, to release hatchling students must have procedural knowledge about the steps to release in the vast sea. On the other hand, students need descriptive knowledge to understand the characteristics of hatchlings as amphibians. Thus, they understand how hatchlings can live in two realms. In summary, in constructing meaning in learning in the context of the environment, teachers need to understand the explanation substance derived from real phenomena, social interactions, and culture; knowledge-transforming tends to be chosen by teachers in delivery strategies; the efferent element of knowledge and aesthetic in the form of imaginative language empowerment is needed to understand the intensity of events; the type of knowledge conveyed by the teacher must be balanced, both descriptive and procedural.

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