

# Development of Reading Module Based on Ecolinguistic Discourse

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**Abstract**— Ecological awareness, labelled with green, has been a familiar icon for institutions and businesses around the world. Higher education, especially Polytechnic serving as a vocational institution preparing students for workplace, needs efforts to equip its graduates with ecological awareness and knowledge. Therefore, the purpose of this research is to develop reading module supporting for such a goal by inserting ecological aspects in reading materials. The result of initially questionnaire about the importance and urgency of this module, taken from English lecturers in Bali State Polytechnic, shows that 94,4% respondents agree and very agree. Following 10 steps required by Research &Development, this reading module is ready to be implemented in English classes. Module consists of four components: ecological text, comprehensive questions, exploration/problem solving and vocabulary. After having tried out in two compared two classes, the result of the experimental group is better than the controlled one. The next step is to evaluate and improve it by trying out in wider users.

**Keywords**— *module, ecolinguistics, ecology*

## I. INTRODUCTION

Advances in science and technology driving major changes in human civilization, begun with the enlightenment movement in the Western world, especially France and Germany since the early 19th century by focusing on the superiority of human rationality and individuality. Its crucial impact is Industrial Revolution starting from the invention of the steam engine until this digital era called the Revolution 4.0. However, the various advances and conveniences of human life must be paid dearly with environmental damage that is increasingly acute and even threatens life on this planet. As a reaction of it, at beginning of the 21st century there has been emerged the thought and movement to save the environment. Ecology is becoming a theme that is getting stronger and more studied in a multi-disciplinary manner so that the "green" label is becoming increasingly popular and global as a sign of concern for environmental sustainability.

The purpose of this "green" movement, besides carrying out real pro-environmental activities, but more importantly also fostering ecological awareness in the current and future generations. Bali State Polytechnic (PNB), as one of the leading higher education institutions in Bali, intelligently reads the signs of this era by taking strategic steps to participate in raising the "green" banner through its flagship programs. In addition to the movement towards a

"green campus", contextually, the institution's flagship programs such as "green tourism" and "green accounting" began to be developed. As an educational institution, therefore, the main goal of PNB is to produce graduates who have ecological insight and competence. To achieve this goal, ecological aspects need to be integrated into the learning process, both intra and extra-curricular. Thus, this Research and Development (R&D) would like to answer the question: How to increase the ecological awareness of Polytechnic students through reading activity in English learning?

The purpose of this research is to develop Reading Module based on ecolinguistic discourse that can be used in English learning for Polytechnic students.

## II. METHOD

The method adopted to this research is *Research and Development* (Borg and Gal, 2002 [1]; Sugiyono, 2016 [2]) with 10 steps as follows:

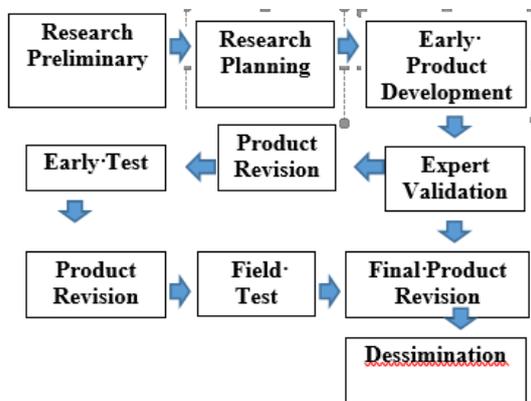


Figure1 Steps of Research and Development Gall & Borg

## III. THEORETICAL GROUNDS

Ecolinguistics is often classified in the branch of applied linguistics signed by the publication of Eniar Haugen, [3] a Norwegian linguist, *The Ecology of Language* in 1972. Furthermore, ecolinguistics have developed with multidisciplinary studies, especially with social sciences and humanities. One of the definitions which is relevant to this study was conveyed by Alexander and Stibbe [4] (2010), "ecolinguistics is the study of the impact of language use in the process of survival bridging the relationships between humans and other living things, as well as the physical environment aiming for the preservation of sustainable relationships and life".

The relationship between language and the environment, stated by Fill and Mushausler [5] (2001: 3), consists of four important insights, namely (i)

language is free and rich in meaning, (ii) language was created by the world, (iii) the world was created by language and (iv) language interrelated with the world. However, Sapir (6) (2001:1) emphasized that the relationship between language and environment is limited to the lexicon (vocabulary) level, not at the phonological and morphological levels.

Subiyanto [7] (2020) conveyed that Bali State Polytechnic students, in their writing, use 0,84 % ecological lexicons compared to the number of words used in the writing. This ratio can be considered as indicator of their less ecological knowledge. Therefore, this finding can be used as a reason for conducting this research and development.

Yuniawan [8] (2018) found that environmental-related vocabulary in news about conservation in media in Indonesia is in the form of: basic words, derivative words, noun phrases, verb phrases and adjective phrases. These findings show that there is a diversity of lexicons used to convey matters related to environmental preservation, meaning that speakers (journalists) use various forms of lexicons to express their reports through written language (news). This finding is relevant to the study by which the students will express their cognitive competence (ecological knowledge) through language especially vocabulary. Thus, learning reading containing ecolinguistic discourse will influence the cognitive process.

Sarmi [9] (2015) found that (i) the linguistic forms of the natural environment lexicon of *Bahasa Using* consist of basic form lexicons, affixed derivatives, re-forms and forms. compound; (ii) word categories in the form of noun lexicons and verb lexicons; (iii) functions for naming flora and fauna; (iv) lexicon dynamics due to linguistic factors, speaker factors and ecological change factors. These findings indicate a link between changes in ecology and language (lexicon) used by speakers. Human experiences in their interactions with the natural surroundings are revealed through language, especially the diversity and dynamics of the lexicon. This finding strengthens the assumption of research that linguistic context (reading with ecolinguistic discourse) will influence the cognitive process (ecological competence).

Mbete [10] (2002) conducted an ecolinguistic study entitled "Phrases in the Lio Language and Their Functions in Preserving the Environment". The findings of this study are the existence of a form of Lio language survival related to the environment due to the public's interest in preserving verbal expressions functioning to harmonize human relationships and the natural surroundings. This resilience is maintained because it contains values and norms conceptually and cognitively so that it functions through verbal expressions related to environmental preservation. This finding is relevant

to this study because it is proven that the conceptual and cognitive aspects of ecology are revealed through language.

#### IV. DISCUSSION

The finding of introduction research conducted by questionnaire relating to the importance of reading module based ecolinguistic taken from 20 language lecturers of Bali State Polytechnic shows that 94,4 % respondents stated agree and very agree to develop a module based on ecolinguistic discourse to support the label “green” for institution. And based on the finding research about the use of ecolinguistic vocabulary of Bali State Polytechnic students writing 0,84 % (Subiyanto,2020), the structure of module consisting of four main components:

1. *Reading Text*: providing a text with ecolinguistic discourse containing ecolinguistic terms and lexicons. Each student should practice their pronunciation by reading aloud. The purpose is to find out that the readers are able to comprehend the content of text with ecological vocabulary; to memorize ecological vocabulary.
2. *Comprehensive Questions*: five questions aiming to lead the readers understanding the content of text. By answering these questions the readers are challenged to deepen their wholly understanding of the text relating with ecolinguistic discourse.
3. *Exploration*: problem solving learning adopted to response ecological issues. The readers can apply their ecological knowledge to solve the problem in a real condition. Besides, they have chance to work together as a team. Not only memorizing words, but the students can apply in contextual problem.
4. *Vocabulary*: exercise with ecological terms and words. The goal is to provide the readers with some ecological words to be memorized.

Evaluation of the module was conducted by trying out it to two groups consisting 30 students in which one class had learned using the module as experimental group, and the other without it called controlled group. Having tested with ecological discourse by given 10 ecological words and terms, the results of experimental group is better than the controlled one. Experimental group has 92% right answers, while the controlled group only 56%.

#### V. CONCLUSION

The module can serve as a supplement for English subject in vocational education, especially in the part of increasing reading skill. Not only for this specific target, however, the module can also grow “green” knowledge and awareness because in this era having ecological competence has been an added value for

human resources. This kind of quality, of course, can indicate the green label attributed to the institution

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