

# Developing Morphological Awareness in Adapted Teaching Materials

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**Abstract**—Developing morphological awareness for the language learner entails the decent activities in which the output of learning provides compelling evidence of such meta linguistic. It is likely to have more in depth discussion on what development is preferable to improve morphological awareness. Unfortunately, teaching materials, in turn, may not contribute to supply the basic of morphology as a beginning well-required proponent. This study is aimed at investigating the effect of adapted teaching materials to develop morphological awareness. The pre-experimental design is used to obtain the evidence in what extent the materials contribute to the development of morphological awareness. The result showed that adapted teaching materials contributed to development of morphological awareness particularly in three aspects of awareness such as derivational, inflectional, and lexical.

**Keywords**—*morphological awareness; teaching materials*

## I. INTRODUCTION

Developing morphological awareness for the language learner entails the decent activities in which the output of learning provides compelling evidence of such meta linguistic. It is likely to have more in depth discussion on what development is preferable to improve morphological awareness. Unfortunately, teaching materials, in turn, may not contribute to supply the basic of morphology as a beginning well-required proponent. Teaching materials is increasingly used in teaching what the teachers are available in the need of subject. Morphological awareness occurs when language learners yield the preparation of recipient. Being aware learners, they recognize interchangeable morpheme of one language to devote into their awareness. That is, recognizing the morpheme to acquire the new language requires sources such as provided materials.

Appropriate teaching materials for early language learners devote the construction of what they acquire from the smallest unit of a new language such as derivational, inflectional, and compounding morphology that develop learners' development on obtaining the structure of language. The ability to gather morphology in the first learning a language is indispensable to boost the language skills.

When learners are able to manipulate the sound to meaning and word formation, then create it onto the combination of

morpheme can be defined as morphological awareness [1]. Furthermore, reading materials in Zhang [2] brought it as an effort to develop morphological awareness in his study. Materials, as a major role in teaching and learning process, facilitates the knowledge of ability to have run-well combination as giving the instruction explicitly. It is essential to probe the aspect that influences the development of morphological awareness. Given the adaptation on teaching materials, learners are able to compound morphological awareness.

Many researchers investigated that many pre-service and in-service teachers have limited knowledge in how they are able to recognize the form of morphological awareness and the teaching materials rarely give the particular task as a mean to teach morpheme [3-5].

Based on Zhang [2], the three facts of morphological aspects yield a significant contribution to lexical inference and to vocabulary knowledge directly or indirectly through lexical inference ability as can be showed in the picture below. Based on the explanation above, the two research questions were addressed in order to gain the empirical evidence on what the effect of materials adapting. Two examine the effect of adapted teaching materials the two research question was addressed namely what is the effect of adapted teaching materials in developing morphological awareness? What kind of morphological awareness that can be developed in adapted teaching materials?

The study of morphological awareness has been studied in term of teaching reading skills. Morphological awareness contributed to the prediction of each outcome variable such as reading test, standardized spelling test and morphological spelling test [6].

Morphological awareness was defined “as sensitivity to the correct extraction of sub-lexical morphological elements from a word and the ability to assemble a word by utilizing one’s understanding of the structural relationships between different morphemes [2]. The ability to manipulate morphemes intentionally [6]. Morphological awareness was defined as “the awareness of morphemic structures of words and the ability to reflect on and manipulate that structure.” The position of the morphological awareness field is put in terms of language awareness as can be seen in the Fig. 1 [1].

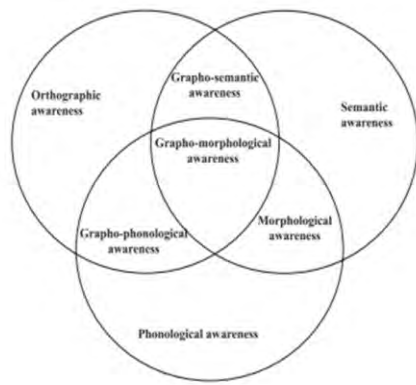


Fig. 1. Position of morphological awareness.

Morphological awareness as a basic notion for students to enhance their reading ability ascertains the important concept of what morphological awareness is. In addition, in a grammar, the smallest unit is a morpheme such as e.g. affixes; root words. Generally speaking, the three parts of the morphology are inflectional morphology (e.g., past tense -ed, third person singular -s), derivational morphology (e.g., prefixes, in-, un-, im-), and compounding (e.g., class + room). On the other hand, Zhang [2] identified that morphological awareness is defined as the ability to recognize and extract sub-lexical morphemic information; the ability to understand morphemic structures and their relationships. Therefore, in the current study, morphological awareness was defined as the basic knowledge both for the teacher and students to have the ability in manipulating the sub-lexical and morphemic structure.

The result of study remains a further question as to whether teaching materials can facilitate the development of morphological awareness in highlighting the role of teaching and learning materials. In the present study, it is indispensable to design the adapted teaching materials to have an impact on what types of morphological awareness.

#### A. Morphological Awareness and Its Relationship to Language Skills

There have been studies of morphological awareness related to the language skills. Some researchers identified the understanding of the spelling system, vocabulary growth, single word reading and reading comprehension [6,7]. This study ascertains the field of the morpheme discipline in how they mediate to acquire the language. Morphological awareness plays the most contribution to what extent the morphological awareness yield the composition.

The model of morphological awareness in Zhang [2] proposed to enhance the reading comprehension. There are three aspect in which contributes to the lexical and vocabulary knowledge such as derivational, inflectional. And compound as can be seen in the picture below [2].

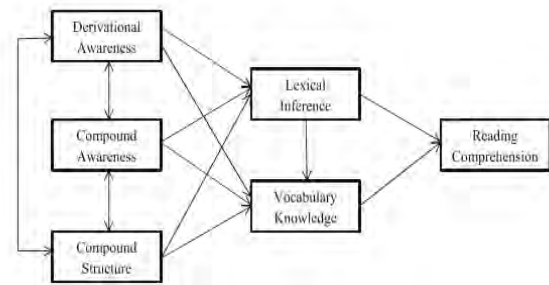


Fig. 2. Model of morphological awareness.

#### B. Previous Study

Based on Zhang [2], students who have ability in lexical inference were caused of the contribution of morphological awareness. In addition, he reported that compound awareness revealed a unique and significant contribution to vocabulary knowledge. It demonstrates a mediating effect predictive of both vocabulary knowledge and reading comprehension. Moreover, vocabulary knowledge mediated the effect of Morphological awareness on reading comprehension. However, no significant contribution of reading comprehension was found after controlling for lexical inference ability and vocabulary knowledge.

Developing language awareness materials point out for non-linguists in curriculum project [8]. He sketched the process of curricular materials development to accompany the 3-hour mediated-video documentary and suggested some of the decisions that must be made in developing materials for educational settings concerning scientific knowledge about morphological awareness as one of subtheme in language awareness term.

Orthography derived from print to pronunciation but the use of morphological units in reading is beneficial to fluency, as words have fewer morphemes than graphemes, and to comprehension, as the use of morphemes includes information related to meaning [6]. Thus, morphological awareness seems to play a role in reading fluency and comprehension even in a transparent orthography.

The relationship between morphological awareness and reading is probably reciprocal rather than unidirectional. There is some empirical evidence to support this conjecture, and it makes good theoretical sense. A reader's ability to unlock the meaning of a novel complex word depends on the reader's inventory of known morphemes. This in turn is sure to depend, at least in part, on volume of exposure to language, above all printed language because of its greater density of less frequent, morphologically more complex, and semantically more transparent vocabulary [1].

Morphological awareness contributed no additional unique variance to character reading at grade 3 beyond phonological awareness, but became significant at grade 5 beyond phonological awareness and the auto regressor [9]. Phonological and morphological awareness of Chinese also predicted unique variance in English word reading at grades 3 and 5, though only phonological awareness remained

significant at grade 5 beyond the auto regressor. These results suggest that phonological and morphological awareness differs in their relative importance at different stages of learning to read different scripts among children in Taiwan, but their effects in reading are persistent longitudinally and pervasive cross-linguistically.

Materials play the contribution to develop students' morphological awareness especially in reading comprehension. Researchers have explored the way morphological awareness gives significant contribution to reading. They mentioned that the derivation and inflectional drives from what they think in a wide range of morpheme construction. It can be identified by giving a sequence of the items of teaching materials.

II. RESEARCH METHODS

The research design used in this study is quantitative with pre-experimental design in which one group of treatment will be assessed to investigate the particular effect of adapted teaching materials to develop morphological awareness. The design of the study requires one phase as can be seen in Fig. 3.

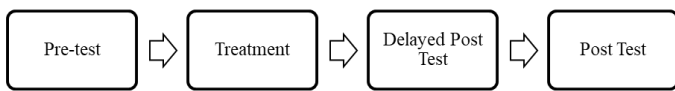


Fig. 3. Pre-experimental research design

A. Participant

The participants of this study are the students of one private university in Cirebon who have at least for years gaining English as instructional in language learning. They are the pre-learned learner acquiring the formal language from their teachers. They consist of 10 female and 12 male students.

B. Technique of Data Collection

The way to obtain the data form the student is by giving the test. The two tests are delivered to ascertain that the participants have the similar data in existence. The two tests are morphological awareness test and vocabulary level test.

Morphological awareness test consists of some adapted test. This test is divided into two categories such as morpheme identification and morphological structure. It is organized of 14 test items which consists of inflectional and derivational suffixes. Meanwhile, vocabulary level test consists of some adapted test. It is organized of 14 test items which consists of low level to high level vocabularies.

C. Technique of Data Analysis

To design an adapted teaching materials that develops morphological awareness, the questionnaire are addressed to the participants. Interview is also conducted to devote the appropriate data in which the result of data can be easily to interpret awareness in selection words. The error here was categorized as the remaining unawareness on morphology.

To adapt teaching materials to develop students' English morphological awareness, it is required to calculate paired sample test which measured the differences on the beginning of the existence in pre-test and calculated after the post test. Table 1 showed the descriptive statistic for mean and standard deviation.

TABLE I. DESCRIPTIVE DATA

Variables	N	Pre-test		Post-test		P
		M	SD	M	SD	
Morpheme Identification	22	66.22	9.32	70.00	5.48	0.01
Morphological structure	22	52.52	5.35	57.76	5.34	0.01

III. RESULTS AND DISCUSSION

The two analysis of pre-test of morphological awareness were examined on morphological test. Morpheme n (22) = 70.00, morphological structure n (22) = 57.76, p < 0.01. It reveals that students in pre-test particularly related with morphological in terms of this can be obtained.

It was probable that adapted materials in teaching English would play as developing tools to acquire the morphological awareness better rather that the input of vocabulary semantically. This hypothesis was sustained particularly with the process of developing awareness of morpheme. We perceived that the lower score of the pre-test as beginning data of participant was significantly indicates the group of one unit of analysis.

Table 1 shows that the students' test on morphological awareness in which the sort of morphological awareness was measured seems more completed component. The choice of words, when they fill out the blank, seems not to many familiar with. However, they aware that findings the good position and pattern the words contextually. In order to examine what similar sound and word alphabetically, students showed more appropriate choice in this selected words.

This indicates that students' awareness on putting words syntactically decay remaining consistence of the use of such vocabulary. Therefore, data demonstrated certain of the morphological understanding.

The table showed that the use morpheme particularly in slight prefix and the last on higher was more than pre-fix in general of grammatically. This summarize number 24 showed the result of the participant that found in adapted materials. The proportion of morpheme and bound morpheme were similar with for both awareness and conscious.

The data showed that inflectional morphology (e.g., past tense -ed, third person singular -s), derivational morphology (e.g., prefixes, in-, un-, im-), and compounding (e.g., class + room) were the main of the participant obtain obstacle. On the other hand, in line with Zhang2 findings that morphological awareness is defined as the ability to recognize and extract sub-

lexical morphemic information; and he ability to understand morphemic structures and their relationships.

The model of morphological awareness to enhance the reading comprehension. There are three aspect in which contributes to the lexical and vocabulary knowledge such as derivational, inflectional. Thus, to answer the first question in what is the effect of adapted teaching materials in developing morphological awareness. The data showed that adapted materials influence students' morphological awareness. To answer the second question in what kind of morphological awareness that can be developed in adapted teaching materials. The description above demonstrated that morpheme syntactically was the most part that students obtain on morphological awareness.

#### IV. CONCLUSION

The findings of the study revealed that adapted teaching materials gave students' development of morphological wareness in which three aspects of awareness such as derivational, inflectional, and lexical outperformed the students' reading comprehension. This implied that designing well-adapted materials made sure the contribution of the language awareness. It influenced the reading comprehension when students engaged with a wide range of reading topics.

In addition, enhancing reading comprehension requires the ability to predict the awareness of morpheme, syntactic, and lexical. Thus, the findings confirmed the two research questions. The data showed that adapted materials influence students' morphological awareness. The description above demonstrated that morpheme syntactically was the most part that students obtain on morphological awareness.

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