

ENGLISH INFLECTIONAL MORPHEME: DRILL TO WORD FORMATION

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Abstract

It was found out that the students have difficulties in differentiating English inflectional morpheme, that is suffix /-es/ and /-s/, to indicate tense for verbs, and plurality for nouns. Other inflectional suffix to mention is /-ing/, /-ed/, /-d/, /-er/, and /-est/. The objective of this study is to improve students' comprehension on inflectional affixation as one of word formation processes by implementing drill technique that is extended drill, or substitution drill. The drill was supported with practicing inductive and deductive approach. The drill and the approach were administered during two cycles of classroom action research. The participant of the research was 86 students taking the subject of Introduction to English Linguistics. This study found out that the students' comprehension on inflectional affixation of word formation improved gradually from cycle 1 to cycle 2 because of the implementation of the substitution drill that alternately practicing inductive and deductive approach.

Keywords: *inflectional morpheme, affixation process, classroom action research, drill technique, and inductive and deductive approach*

INTRODUCTION

Affixation process is process to affix affixes or bound morpheme to root or base. Affixation is one of word formation processes in morphology, a sub-branch of linguistics that studies structure of word, form or morf that distinguishes meaning. Other process to mention is reduplication and abbreviation.

The result of mid test of Introduction to English Linguistics subject indicated that the comprehension of inflectional affixation is still insufficient. The mid test covered minimal pair to represent phonology, and inflectional affixation to represent morphology. The minimal pair is test used to test phoneme or sound that distinguishes meaning. The attention paid to this study is the inflectional affixation to represent the morphology, the process of word formation.

The weaknesses of comprehension on inflectional affixation needs special attention since the inflectional affixation is fundamental base to develop vocabulary. Extended application of the development of the vocabulary through inflectional affixation may influence mastery and comprehension of writing skill and other language feature of English. Therefore, this study is required and relevant to conduct by implementing drill technique in a classroom action research (CAR).

Moreover, the coverage of this study is a part of syllabus of the subject that is morphology. Affixation as a process of morphology is still broader, covering derivational and inflectional. Hence, this study is on the inflectional affixation as its focus. Inflectional affixation is a process of morphology based on the structure of free morpheme (FM) and bound morpheme (BM). In brief, the word formation is the structure of the FM and the BM.

The FM is base or root that is verb, noun and adjective. The BM is affix consisting of prefix, suffix, infix, and circumfix. In term of position, the prefix is initial, while the suffix is final. The infix, the one that is not found in English, is initial or between first phoneme and vowel of a root or base, while the circumfix is initial and final (Yurtbasi, 2015).

Unlike derivational affixation that involves all affixes in word formation, the inflectional affixation only involves suffixes. Thus, the inflection affixation is process of suffixation, or word formation process that affixes suffix to root or base. In other word, based on word structure, the inflectional morpheme is suffix.

Drill technique is technique that repeats or repetition, and used to teach language, especially spelling and pronunciation of vocabulary (Tice, 2019). Nevertheless, the drill technique as proposed by Bunau (2009), can also be developed to teach language feature as in teaching simple descriptive text. The technique is assumed still relevant to teach inflectional affixation that involves suffix /-es/ and /-s/.

The CAR is a research that is used to overcome a particular problem or difficulty in classroom, and implemented based on the cycles of activity (Mettetal, 2015). So, the CAR is not only used to overcome problem or difficulty classically, but also used to overcome individual student with particular problem or difficulty in learning. The problem for instance is low comprehension of explanation, difficulty in regenerating example, difficulty in developing competence, from receptive to productive competence.

The question and objective of this study deal with how drill technique applied in the CAR improves the comprehension of inflectional affixation in term of suffix:

1. /-es/ and /-s/ that is suffixed to the FM that is verbs to signify tense, and the tense is simple present.
2. /-es/ and /-s/ that is suffixed to the FM that is nouns to signify plurality.

Affixation process is a process that attaches affix to FM (Bunau & Yusof, 2018). The FM is root or base with its part of speech or word class that is verb, noun, adjective, and adverb. As mentioned earlier, the affixation is of derivational and inflectional. The word derived through derivational affixation is called derivational word, and the word formed through inflectional affixation is called inflectional word.

The BM that is affix may function as both class-maintaining and class-changing (Bunau, 2019). In the process of derivational affixation, the BM functions to maintain and to change word class. Therefore, the BM in derivational affixation is both class-maintaining as in /autopay/ and class-changing as well, as in /development/. The BM /auto-/ that is prefix functions to maintain the FM /pay/

that is verb, and derives /autopay/ that is still verb. The BM /-ment/ that is suffix functions to change the FM /develop/ that is verb into /development/ that is noun.

The process of inflectional affixation, unlike the derivational affixation, only involves suffix and only functions to maintain word class. It is only the marker to signify tense for verbs, plurality for nouns, comparative and superlative for adjectives (Denham & Lobeck, 2010). Based on the process of affixation, the inflectional affixation is similar to prefixation. If prefix is affixed before the FM, then the inflectional morpheme that is suffix is affixed after the FM.

The BM of derivational affixation is of prefix, suffix, infix, and circumfix. Unlike the BM of the derivational affixation, the BM of inflectional affixation is only of suffix. The BM of inflectional that is suffix consists of /-es/ and /-s/, /-ed/ dan /-d/, /-ing/, and /-er/ and /-est/ (Fromklin, Rodman, & Hyams, 2011, p. 50). Again, based on the structure of word, the inflectional morpheme is suffix. In other word, inflectional affixation is the process to attach suffix to the FM. And the process is called suffixation. Grammatically, the inflectional suffix consisting of /-es/ and /-s/ as the scope of this study is to indicate tense for verbs and plurality for nouns.

The inflectional suffix is allomorph of a form or morf, that is allomorph of plurality nouns, of present, past and progressive tenses, and allomorph of comparative and superlative adjectives. Those allomorphs are the markers. Based on the structure of word, the allomorph is member or variant of the morpheme, or the morpheme of its real usage. It is real morf based on the particular condition, that is phonological, grammatical, and lexical (Bunau, 2017). Therefore, the suffix /-es/ and /-s/, /-ed/ and /-d/, /-ing/, and /-er/ and /-est/ are the allomorphs of inflectional morpheme.

Unlike derivational affix that may function as class-maintaining and class-changing for part of speech or word class, the inflectional affix only functions as class-maintaining. For instance, word /buyer/ is noun that is formed by affixing suffix /-er/ to root 'buy' that is verb (Denham & Lobeck, 2010). For inflectional affixation, the attachment suffix /-es/, as an example, the root /fix/ that is verb becoming word /fixes/ does not change part of speech. It maintains part speech remaining as verb. Therefore, inflectional affix is meant to add grammatical information to a word (Denham & Lobeck, 2010, p. 158). Affix /-es/ is marker that signifies that subject of sentence that is simple present tense is the third singular personal pronoun. It is also similar to word /churches/, /boxes/, /watches/, and /matches/, in which the affix /-es/ is marker to indicate plurality for noun (Kieffer & Lesaux, 2007).

Aspiration of final phoneme or sound of root is phonologically conditioned when the BM is attached. The condition is covert and overt (Bunau, 2019). Phoneme /y/ as found in word /cries/ is covert when root /cry/ accepts suffix /-es/. The phoneme /y/ is covert, then is changed becoming phoneme /i/, as it is in inflectional word /cries/. Reversely, the process of morphology also applies to phonological rule that is overt. For instance, the FM /cut/ that becomes /cutting/ when inflectional suffix /-ing/ is affixed. The phoneme /t/ that is phonologically conditioned is overt, resulting double consonant of phoneme /t/ at the final

phoneme of root before accepting the suffix /-ing/. As an addition, the double consonant may apply to a monosyllabic root verbs.

According to the behaviorists, drill technique simply means repetition, aiming at the mastery of word and phrase (Tice, 2019). Nevertheless, the drill technique may also be developed as extended drill or substitution drill to teach word with different structure and its development possibility. Look at the example of the substitution drill of root /go/ that involves suffix /-es/ in forming word /goes/ (Tice, 2019) as in the following:

Prompt : I go to work. He?
Response : He goes to work.

With extended drill technique or substitution drill technique, the process of inflectional affixation that is drilled through CAR activity may also be repeated in similar way. The writer provides more instances of the technique to form inflectional word by attaching inflectional morpheme to the FM like:

1. Prompt : We fix the chord. She?
Response : She fixes the chord.
2. Prompt : The babies cry over and over. Lea?
Response : Lea cries over and over.
3. Prompt : They do their writing. Billy?
Response : Billy does his writing.
4. Prompt : Amir and Mira cook every evening. Ahmad?
Response : Ahmad cooks every evening.
5. Prompt : My mother freezes one mango. Ten?
Response : My mother freezes ten mangoes.
6. Prompt : He usually returns home early. Past tense?
Response : He usually returned home early.
7. Prompt : We fish by the river bank. Present continuous?
Response : We are fishing by the river bank now.
8. Prompt : They cut the log. Past continuous?
Response : They were cutting the log (when we passed the road).
9. Prompt : Our chicken lays one egg. Twelve?
Response : Our chicken lays twelve eggs.
10. Prompt : Sinta is tall. Comparative?
Response : Sinta is taller (than Prista).
11. Prompt : Ralph is smart. Superlative?
Response : Ralph is the smartest (among the students in the class).

Prompting can be done by responding, orally as a speaking skill, or in written form as a writing skill. With drill technique, prompting and responding can be repeated as many times as needed. The drill may also include the activity by even asking students to change the subject, predicate, object, or adverb of a sentence according to the prompt that is spoken or written. With similar way, inflectional affixation can be drilled and developed. More instances is elaborated by the writer as in the following:

1. Prompt : We fix the chord. She?

- Response : She fixes the chord.
 Prompt : Ribbon?
 Response : She fixes the ribbon.
2. Prompt : The babies cry over and over. Lea?
 Response : Lea cries over and over.
 Prompt : Vanessa Kirby?
 Response : Vanessa Kirby cries over and over.
3. Prompt : They do their writing. Billy?
 Response : Billy does his writing.
 Prompt : Claire Foy?
 Response : Claire Foy does her writing.
4. Prompt : Amir and Mira cook every evening. Ahmad?
 Response : Ahmad cooks every evening.
 Prompt : Read the book?
 Response : Ahmad reads the book.
5. Prompt : He usually return home early. Past tense?
 Response : He usually returned home early.
 Prompt : Close the stall early?
 Response : He usually closed the stall early.

Subject We, predicate Fix, and object The Chord as in example number 1 above can be substituted using the extended drill technique through repetition of Prompt and Response by changing We into He, Fix becoming Fixes, and The Chord becoming The Ribbon, and suiting the predicate based on the context of the tense.

The CAR is a method to identify what is best in the classroom in order to improve students comprehension in learning activity (Mettetal, 2015). Thus, each teaching situation is unique in term of content, level, skill, and style of student learning and teacher teaching. According to Mettetal (2015), by implementing CAR, an educator can identify what is the most suitable content, level, skill, and style to maximize the student learning in the classroom.

Drill technique used to teach the process of inflectional affixation in this CAR method was applied by implementing inductive and deductive technique alternately. The purpose was to give chance to students to experience the two techniques directly. Inductive learning is a process to identify the rule or formula based on the facts or examples, while deductive learning is a process to apply the rule or formula into the examples or the usages (www.teachingenglish.org.uk/article/presenting-new-language, 2019). The flow of inductive learning is from specific to general, or from examples and facts to generalization. The flow of deductive learning, on the contrary, is from general to specific, for instance, the examples or the usages.

With drill technique, the students were asked inductively to complete the process of inflectional affixation of suffix /-es/ that is affixed to verbs. The writer reports the result inductive approach teaching as in the following Table 1:

Table 1. Inductive Approach to Teach Inflectional Affixation			
Category	Free Morpheme (Root), verbs	Inflectional words	Students identify pattern/formula, (provided by the writer as example)
1	Fax	Faxes	Final phoneme of root is /x/

2	Ski	Skies	Final phoneme of root is /i/
3	Catch	Catches	Final sound of root is /ch/
4	Trash	Trashes	Final sound of root is /sh/
5	Cross	Crosses	Final phoneme/sound of root is /ss/
6	Go	Goes	Final phoneme of root is /o/
7	Fry	Fries	Final phoneme of root is /y/

Moreover, with drill technique that is implemented through CAR method, the students were also asked deductively to complete the process of inflectional affixation of suffix /-es/ to verbs. The deductive approach of teaching inflectional affixation is provided by the writer as in the following Table 2:

Table 2. Deductive Approach to Teach Inflectional Affixation			
Category	Feature of final phoneme or sound of root	Root, verbs	Students' example of inflectional word (provided by the writer as example)
1	/x/	Fax	Faxes
2	/i/	Sky	Skies
3	/ch/	Catch	Catches
4	/sh/	Trash	Trashes
5	/ss/	Cross	Crosses
6	/o/	Go	Goes
7	/y/	Fry	Fries

The final step of the implementation of substitution drill in teaching inflectional affixation using CAR method is to use the inflectional word in sentence. To make sentence standardized, the example of root and its usage in sentence is taken from Cambridge or Oxford dictionary, online, or offline. The use of root verb /fix/ in sentence is as in Webster dictionary online (www.merriam-webster.com/dictionary/fix, 2019), and should be copied and pasted by the students:

S	P	O	Adv.
↓	↓	↓	↓
He	fixed	the fence	last weekend.

Moreover, the students create their own sentence by modifying Subject, Predicate, that is inflectional word, Object, and Adverb that signifies Tense that is Simple Present Tense by imitating the example provided in the dictionary, for instance like:

S	P	O	Adv.
↓	↓	↓	↓
Billy	fixes	the bicycle	every weekend.

Based on the example of the usage of the inflectional word /fixes/ above, the students are trained by applying extended or substitution drill to be able to write their own sentence that is diverted from the sentence structure.

METHOD

The method of this study is CAR. As Mettetal (2015) said, the CAR is to identify what is the most suitable to maximize in the classroom. The teaching and learning of inflectional affixation process was conducted through the implementation of two cycles of CAR, and its steps of activity is Planning, Acting, Observing, and Reflecting. The CAR and its activities in Cycle 1 is as follows:

1. Planning

The objective of teaching and learning by implementing CAR method was planned in this step. The objective is to improve students' comprehension in producing new complex word through the process of inflectional affixation of morpheme /-es/ and /-s/ that is affixed to verbs and nouns.

2. Acting

In this step, the researcher lecturer taught the students inflectional affixation of suffix /-es/ and /-s/, and the collaborator observed and noted the process and activity of teaching and learning.

3. Observing

In this step, the collaborator fulfilled by ticking the columns the aspect of teaching and learning of inflectional affixation as set in observation sheet. Besides, the collaborator also noted on the field note the information gathered during the activity and process of teaching and learning. The information noted was the one that was not listed to tick in observation sheet.

4. Reflecting

The researcher lecturer and collaborator reflected the achievement of teaching objective as planned according to result of observation and note taking of teaching and learning activity and process, and based on the formative test administered by the phase of post activity of the teaching.

The technique of data collection was observing, noting, and testing. The tool of data collection was observation sheet containing the aspect of teaching and learning the process of inflectional affixation. Another tool was field note used to jot the process and activity of teaching and learning. Besides that, the tool also included formative test. In cycle 1, the formative test was essay consisting of 8 items, and each was scored 12.50 point, making total of 100. A point of 4, or 30% was used as a rubric, or consolation score to appreciate student's imperfect answer since the inflectional word they produced should be applied in sentence. In cycle 2, the formative test was multiple choice consisting of 25 items. Each was scored 4 point, making total of 100.

Participant of the CAR was 86 students of English Education Study Program of Teacher Training and Education Faculty of Tanjungpura University taking the subject of Introduction to English Linguistics. The participant was determined according to sampling technique (Cresswell, 2009, p. 381). The type of sampling is cluster (Lewin, 2005, p. 217), consisting of 43 students of Class B+ Regular Program, and 43 students of Class A Extension Program. The CAR was conducted at campus classroom. The method of data analysis is qualitative (Creswell, 2012). It is used to analyze the result of observation, field note and formative test, and to present them into description.

RESULTS AND DISCUSSION

The result of data collection of the two cycles of the CAR based on the tools of data collection consists of the result of observation, field note, and formative test.

1. Result of Observation, Cycle 1 and 2

The result of observation based on ticked observation sheet showed that researcher lecturer and collaborator student had collaboratively implemented the process of teaching and observation as laid out in the following Table 3:

Table 3: Observation Sheet of CAR to Teach Inflectional Affixation, Cycle 1 and 2				
No	Action committed	Acting Observed	Observation Tick List	
			(Cycle 1)	(Cycle 2)
1.1a	Lecturer/researcher	Explaining, providing examples, generalizing the process of inflectional affixation of suffix /-es/ and /-s/ for Verbs.	^	^
1.1b	Students, and particular students, for cycle 2	Paying attention, noting, asking the process of inflectional affixation of suffix /-es/ and /-s/ for Verbs.	^	^
1.2a	Lecturer/researcher	Explaining, providing examples using inflectional word containing suffix /-es/ and /-s/ based on dictionary, and asking students to write theirs..	^	^
1.2b	Students, and particular students, for cycle 2	Looking for inflectional word containing suffix /-es/ and /-s/ in printed or online dictionary, copying and pasting, and making own adaptation sentences.	^	^

The table 3 above shows that collaborator student observed the lecturer teaching and the student learning process and activity by ticking. Although observation sheet list was all ticked, but the quality of acting observed will be noted as field notes for its inappropriateness.

2. Result of Field Notes, Cycle 1 and 2

Although the observation sheet shows that researcher, collaborator and participant student had committed their function and portion, but the field notes of Cycle 1 also informed that some participants did not really pay attention to explanation given. Moreover, some participants did not check the example of the use of inflectional word in dictionary, and neither did they create their own sentence based on the example in the dictionary as shown by the lecturer researcher. Besides that, it was noted that some of the participants still had confusing conception between /-es/ and /-s/ for verbs that indicate Tense, and /-es/ and /-s/ for nouns that indicate Plurality. The result of field note for Cycle 2 showed that attention to explanation, examples checking, and own sentences writing were very much better compared to Cycle 1.

3. Result of Formative Test, Cycle 1 and 2

As the implementation of Cycle 1 and Cycle 2 of the CAR ended, the formative test was administered to measure the participants' comprehension on the process of inflectional affixation. The result of the formative test for Cycle 1 and Cycle 2 is in the following Table 4:

Tabel 4. Result of Formative Test, Cycle 1 and 2

Cycle 1			Cycle 2		
No	Descriptor	Number of student with less than 60 score	No	Descriptor	Number of student with less than 60 score
1	Total score is 5,976	16	1	Total score is 6,530	0
2	Mean score is 69.49		2	Mean score is 75.93	

Table 4 above indicates that mean score of 86 participants of the Cycle 1 of the CAR is 69.49. Nevertheless, the mean score does not indicate that all of the participants had passed the Minimum Passing Grade (MPG). The MPG for Mid and Final Test Term is 60 or C. The Table 4 above also indicates that there were 16 participants who had not reached a C or 60 of the MPG. Therefore, the 16 participants had to improve their comprehension on the process of inflectional affixation of test formative of Cycle 2 in order to pass the MPG. Moreover, the Table 4 above also informs that the mean score of the total participants is 75.93, and left no participants with less than 60 of score. All of the participants had passed the MPG as the CAR was implemented in Cycle 2. Meaning to say, that there was improvement of comprehension on the process of affixation, from Cycle 1 to Cycle 2 in term of mean score.

CONCLUSION

A two cycle activity to implement the CAR method is concluded successful to improve students' comprehension on the process of English inflectional affixation, a word formation process involving suffix /-es/ and /-s/. The two suffixes are used to signify the Tense, that is Simple Present Tense. The inflectional word containing the two suffixes are applied in sentence, in which the subject is the third personal pronoun. It is also concluded that the comprehension of the inflectional morpheme, that is suffix /-es/ and /-s/, had successfully improved because of the implementation of the drill technique, and the inductive and deductive approach alternately during the activity of a two cycle of CAR.

Based on the conclusion of this CAR, it is therefore friendly suggested to teachers, or educators to:

1. Teach students by implementing CAR method more often. Teaching by implementing CAR, as implied through this CAR, is more focused, directed, and controlled.
2. Do the process of teaching by applying substitution, or extended drill technique. Although the impression of technique is out of date, but this drill technique, according to the result of this CAR, is still relevant (instead of lecturing technique, for example). This drill technique does not have to be implemented with CAR. It can be used in daily ordinary teaching.
3. Do the process of teaching by applying alternately the inductive and deductive approach. This approach will make the students to directly experience the process of reasoning in different way. By doing so, the students will be able to complete their exercises during the teaching and learning process in different way too.

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