

Using anaphoric cueing to increase second grade students' reading comprehension

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Abstract

The study aims at describing the effect of anaphoric cueing to increase second grade student's reading comprehension, by answering the research questions: Which has more significant effect on reading comprehension: anaphoric cueing or conventional reading strategy? This study involved two parallel classes of second grade at one junior high schools in South Minahasa. There were 30 students each in the academic year 2019/2020. The data in this study were collected using identification test in which in each item an anaphoric expression was underlined. The analyzed statistically using t-test for independent sample. Result of the analysis is the group with anaphoric cueing intervention outperformed that one treated using conventional teaching strategy. Thus, it could concluded that anaphoric cueing intervention positively affects reading comprehension.

Keywords: reading comprehension, anaphoric cueing, conventional reading strategy

Introduction

Information in written texts is organized in a number of ways. In narrative text, information is organized in chronological order. In descriptive text, it is organized following spatial order. In expository, information can be organized in cause-effect pattern, process, contrast-comparison, exemplification, etc. In addition, a good text in English usually begins with a topic sentence, followed by supporting sentences and a concluding sentence. Since a text is a unit of meaning (Halliday & Hasan, 1976) ^[8], all sentences in the text are interrelated. Usually, the interrelationships are realized through cohesive devices. A text is cohesive when the stretches of language are hung together with ties (Hasan, 1968) ^[9]. According to Halliday and Hasan (1976) ^[8], a text is coherent which must satisfy two conditions: one is a text must be consistent with context in which it is created, the other is a text must have cohesion, that is, all parts in a text must be connected by cohesive devices.

A text is cohesive when the elements are tied together and considered meaningful to the reader. Cohesion occurs when the interpretation of one item depends on the other, i.e. one item presupposes the other (Halliday & Hasan, 1976) ^[8]. For instance in the following text:

(a) Amy went to the party (1). She sat with Sara (2).

The interpretation of the item *she* in (2) depends on the lexical item *Amy* in (1). Therefore, (1) and (2) are considered cohesive because we cannot understand the meaning of *she* unless *Amy* exists in the text. Of the existing cohesive devices, reference is most commonly found in written texts.

References are basic cohesive devices for texturing the semantic unity of a text. Reference cohesion is the primary form of cohesion that enables children to develop cohesiveness in a text (de Villiers & de Villiers, 1979) ^[5]. These references help avoid repetition and provide the texts with semantic unity which increases the interest of readers (Jabeen *et al.*, 2014) ^[11]. Since one of the major obstacles or

difficulties in comprehending texts is the recognition or identification of words and phrases that refer to the same idea which traditionally have been called 'reference words' or referential expressions (Rashid *et al.*, 2010) ^[14], One way to accomplish is accomplished is through anaphoric cueing. Anaphoric cueing as a means to improve reading comprehension which involves personal pronoun instruction in some form during reading. Yuill and Oakhill (1988) ^[15] found that anaphoric cueing significantly increased the students' comprehension; most students were able to correctly select the anaphor's antecedent noun. Its effectiveness with students having low-level English competence has not been widely revealed. For this reason, the present study was conducted.

Research Design

The objectives of this study is to answer the question: Which has more significant effect on reading comprehension: anaphoric cueing or conventional reading strategy? In terms of purpose, the present study was experimental in nature in that it aimed at describing a cause-effect relationship between the independent variable, *anaphoric cueing* and *conventional reading strategy* and the dependent variable, *students' comprehension*. In other word, the study aimed at describing the effect of using *anaphoric cueing* and *conventional reading strategy* on junior high school students' reading comprehension.

The experiment involved two parallel classes with 30 students each. Therefore, intact-group design was used. Two classes were selected for the experiment without random selection because the students had been grouped before the research was conducted, it was difficult (if not impossible) to form new groups randomly. The intact group design has a number of weaknesses seen in terms of extraneous variables which possibly affected internal validity. For this reason, control should be exercised to minimize the effect of these variables. Control itself is defined as efforts on the part of a researcher to remove the influence of any variable other

than the independent variable that may affect performance on a dependent variable (Gay *et al.*, 2012:624) ^[6]. The study was conducted at one junior high school in the South Minahasa Regency in the academic year 2019/2020. Two parallel classes in the second grade was purposefully selected with 30 students each. The data in this study were collected using identification test in which in each item an anaphoric expression was underlined and the students were required to identify its referent (or antecedent) to which the expression referred. The test consisted of 40 short excerpts with four sentences maximally. The test was scored following the criteria: correct identification got 1, incorrect got 0. Since it was a self-developed, the test should be validated and tried out before it was used to collect the data. The validation was conducted by a panel experts consisting of two English teachers. The two experts involved indicated that the test is good (90%) in terms of its content having validated it. The test was then pilot-tested. The pilot-testing involved students from 8th grade in that particular same school. The pilot testing was conducted to obtain data in order to determine whether the test items were empirically valid and reliable. The pilot-testing scores were then statistically analyzed using Point Bi-serial Correlation for item validity. Result of the statistical analysis indicated that of 40 items, 33 were valid, and 7 invalid. Of the valid items, 30 were selected for as the data collecting instrument in this study. The data collected in this study were numeric in nature; therefore, the analysis was done statistically using t-test for independent sample.

Findings and Discussion

In the present study, as pointed out before, there were two independent variables *anaphoric cueing* and *conventional reading strategy* and one dependent variable, *students' comprehension*. Since two groups were involved, the design used can be visually displayed as this:

Intact-Group Design

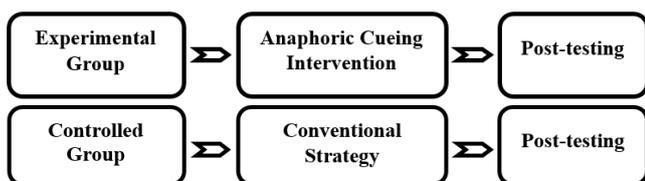


Fig 1

Variables

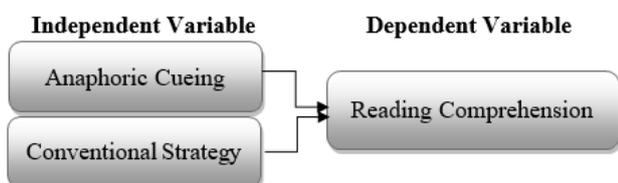


Fig 2: Relationships between Independent & Dependent Variables

Based on the research questions mentioned before, this study tried to verify the following hypothesis
Alternative hypothesis (Ha)

Ha: Anaphoric cueing intervention more significantly affects junior high school (SMP) students' reading comprehension compared to conventional teaching strategy.

Null hypothesis (Ho)

Ho: Anaphoric cueing intervention does not significantly affect junior high school (SMP) Students' reading comprehension compared to conventional teaching strategy.

In this study, the data collected were statistically analyzed using t-test for independent sample. Ideally, assumptions of homogeneity and normality should be met if inferential statistic is used. However, since the sample per group is 30 and the same for both groups, these assumptions were ignored. According to Hays in Moore (1983:281), if minimal sample per group is 30 and the same or both groups, assumption of normality and homogeneity do not seriously affect result of the experiment treatment. Due to the researcher's limitation in running the SPSS, the data in this study were manually analyzed. To analyze the data using t-test, it was important top firstly calculate the sum and sums squares of X and Y. Results of the calculations is displayed in Table 1. The sums and sum squares of X and Y and the mean (see the data in the appendix A.

Table 1: The sums of X, Y, X², Y²& mean X& Y

| Immediate Retention | | | |
|---------------------|------|-----------------|------|
| Experimental Group | | Control Group | |
| ΣX | 462 | ΣY | 388 |
| ΣX ² | 7686 | ΣY ² | 5408 |
| \bar{X} | 15.4 | \bar{Y} | 12.9 |
| n ₁ | 30 | n ₂ | 30 |

Based on the information depicted in Table 1, the statistical analysis using t-test for independent sample was manually done.

Thus, $t_{(observed)}$ is 2.345. At $p(\alpha)$ 0.05 and $df/58$, the $t_{(table)}$ was 2.000. Result of this statistical analysis is compared or matched with the criteria for accepting or rejecting the null hypothesis displayed in Table 2.

Table 2: Criteria for Accepting/Rejecting Ho.

| Criteria | P level | Meaning |
|-----------------------------------|---------|-----------|
| $t_{(observed)} \leq t_{(table)}$ | 0,05 | accept Ho |
| $t_{(observed)} \geq t_{(table)}$ | 0,05 | Reject Ho |

Since the $t_{(observed)}$ is 2.345 is larger than the $t_{(table)}$, 2.000, it can be stated that the null hypothesis, Anaphoric cueing intervention does not significantly affect junior high school (SMP) students' reading comprehension compared to conventional teaching strategy, is rejected. This, in other words, means that the group with anaphoric cueing intervention outperformed that one treated using conventional teaching strategy. Briefly stated, anaphoric cueing intervention positively affects reading comprehension.

Discussion

Anaphoric expressions signal the co-referential identity or near identity of two concepts (Baumann & Stevenson, 1986) ^[3]. They usually consist of an anaphoric term and a word, phrase or clause to which that term refers (known as the referent). Anaphoric resolution is the matching of an anaphoric term to its referent. The most frequent and familiar type of anaphoric expressions in text are pronouns which act as substitutes for previous nouns and noun

phrases (Baumann, 1987) ^[2]. An example of a pronoun anaphoric expression is:

“John fell down the stairs. He hurt his head,” The pronoun he’ refers to John. Anaphoric expressions in text assume importance because of their frequency and function. They account for between 13 and 15 percent of all text (Baumann, 1987) ^[2] and act as cohesive devices in the text (Irwin, 1986) ^[3]. Anaphoric expressions transport concepts forwards and backwards in the text without continual repetition. Readers who are unable to resolve some or all of the meanings of anaphoric terms are likely to have the cohesion of the text destroyed or interrupted resulting, in partial comprehension of the text. An important component of the comprehension process is the reader's ability to integrate current information with information that has already been mentioned earlier in a text. One aspect of this integration process involves anaphoric resolution, whereby co-preferentiality occurs when an anaphoric item (e.g. a pronoun, determiner or noun phrase) is linked with an already given antecedent in the text. Successful anaphoric resolution is typically associated with skilled readers/comprehenders.

Students who competently comprehend reading mostly have well-developed schemata and language systems with which to interpret text meaning, whereas those who have difficulty comprehending when reading generally do not have well-developed schemata and language system (Golinkoff, 1975/76). In the absence of well-developed schemata the latter students are more likely to depend on information encoded in the text's print to attain text meaning (Marshall & Glock, 1978/79) ^[12]. In this case, knowledge of syntactic rules plays a crucial role. In reading comprehension process, it is commonly admitted that knowledge of vocabulary is important. However, it should be noted that, as pointed out by Cooper and Petrosky (1976) ^[4], syntactic rules act as a bridge between the visual, or surface structure, and the meaning, or deep structure, of text.

For junior high school and senior high students who do not become competent in the use of syntactic rules in written text do so will find it difficult to comprehend a written text because of three interactive factors: the limited processing capacity available to them, the sophisticated nature of syntactic rules in written text, and the lack of opportunities to learn syntactic rules through reading experiences (Busing, 1993: 3) ^[11]. One way to increase syntactic processing skills is to directly teach such rules to students. Students receiving instruction in syntactic rules will improve their syntactic processing skills, and therefore improve their ability to extract from the text the meaning necessary for comprehension.

One important syntactic processing skill is anaphoric resolution, especially anaphoric cueing. Therefore, explicit teaching of teaching anaphoric resolution skills is expected to help students resolving anaphora when reading text. The focus should be on both the explicitness and implicitness of the antecedent–anaphor relation. The reason is the studies also showed that successful anaphor comprehension in reading is related to the explicitness of the antecedent–anaphor relation. Furthermore, it was also revealed that identification of anaphoric relations can be easier if visual aids were used.

Conclusion

Result of statistical analysis reveals that the $t_{(observed)}$ is 2.345

is larger than the $t_{(table)}$, 2.000. This indicates that the anaphoric cueing group outperformed the one with conventional strategy intervention. This, in other words, means that anaphoric cueing strategy positively affects students' reading comprehension. Thus, it could be concluded that anaphoric cueing intervention positively affects reading comprehension.

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