Effects of Prereading Strategies on EFL Reading by Indonesian College Students Having Different Characteristics.

NOTE


ABSTRACT

An Indonesian study on prereading strategies for reading in English as a Foreign Language (EFL) is reported. Three areas were examined: (1) differences in the reading achievement of groups receiving AO ("advance organizer" or meaningful verbal learning, based on the learning theory of David Ausubel) techniques or "Daftar Kata-Kata Pokok" (DKP, or key-word) techniques; (2) differences in reading achievement of good and poor readers; and (3) differences in reading achievement of field-independent and field-dependent subjects. Second-semester English Department students at four private universities in Surabaya, Indonesia, were tested. The following findings are noted: (1) the AO technique can improve reading comprehension when compared to DKP techniques, but not when the test items measure only the ability of near transfer; (2) in multiple-choice and cloze-diagram tests, poor readers do not show much improvement in comprehension, but the AO technique could improve their comprehension; and (3) field-independent subjects have better reading achievement than field-dependents, but the AO technique can further improve the latter's comprehension. A reading test is included. Contains 44 references. (LB)
EFFECTS OF PREREADING STRATEGIES ON EFL READING
BY INDONESIAN COLLEGE STUDENTS
HAVING DIFFERENT CHARACTERISTICS

by

Veronica L Diptoadi
English Department
Unika Widyatama Mandala, Surabaya - Indonesia

A Paper presented at the 1991 RELC Regional Seminar
Singapore, April 22 - 26, 1991
INTRODUCTION

Reading in English is a problem frequently encountered by our Indonesian students in general. Even, English department students still have difficulty comprehending the content of a reading text, although they are already in the higher semesters. Therefore, it is of the utmost importance to find an appropriate reading technique which could enhance the students' reading comprehension.

This article reports a study on prereading strategies of reading in English as a foreign language. It is designed to answer the following research questions: (1) Is there a significant difference in the reading achievement between the groups receiving the AO technique and the DKP technique? (2) Is there a significant difference in the reading achievement between good readers and poor readers? (3) Is there a significant difference in the reading achievement between the subjects who are Field-Independent and those who are Field-Dependent?

PREREADING STRATEGIES

There are several different prereading strategies in EFL reading. The prereading strategies which will be the focus in this study are the use of a list of key words found in the text and the use of advance organizers.

During the daily teaching of English, it can often be observed that before dealing with the reading passage, a teacher usually presents to the students a list of the key
words found in the reading text that follows. In this study, this technique will be referred to as "Daftar Kata-Kata Pokok" (DKP). This list consists of key words which are put in isolation and given some explanation in bahasa Indonesia. The students have to read and understand the words before going to the reading passage.

The second strategy which uses advance organizers (AO), is based on the learning theory of David Ausubel also called meaningful verbal learning, which emphasizes on the use of prior knowledge in comprehending a reading text. The essence of this theory is that if a new concept is to be understood, it should be related to a concept in the student's cognitive structure, which functions as an ideational scaffolding for those new concepts. In the process of meaningful verbal learning, the students are required to participate actively in processing the new material by comparing it with their prior knowledge, so that this new material can be integrated easily into their cognitive structures. According to Ausubel (1978:171) the most efficient way to relate the new concepts with their relevant concepts in the students' cognitive structures is to use "an introductory material at a higher level of abstraction, generality and inclusiveness than the learning task itself", called Advance Organizers (AO), presented before the material to be learned. In the reading process, AO as well as the reading text are organized in accordance with the principles of progressive differentiation and integrative reconciliation, (Ausubel, 1978:188-195) to assist the students to find the relevant concepts in their cognitive structures, and to relate those concepts with the concepts in the new material, so as to enhance the students' comprehension of the reading text. If the reading material is to be organized according to the principle of progressive differentiation, then the most inclusive and abstract concepts are presented first and gradually followed by more
detailed and specific concepts. Whereas, according to the principle of integrative reconciliation the new concepts found in the reading material should be meaningfully related to relevant concepts in the student's cognitive structure. Therefore, to effectively apply these two principles in the reading process, organizers should have the following characteristics (Ausubel, 1963:81): "appropriately relevant and inclusive" and "maximally stable and discriminable from related conceptual systems in the learner's cognitive structure".

STUDENTS' CHARACTERISTICS

The reading comprehension of the students does not only depend on the technique being used, but it is also influenced by the students' characteristics, which is one of the components in the design of instruction (Dick & Carey, 1985:87). In general, this particular component has not been fully considered in the design of instruction, therefore, the writer would like to place it in its rightful position in the teaching-learning process. This is also in accordance with the communicative approach in language teaching, in which the focus is on students' needs. That's why a teacher should adapt his teaching techniques, materials and instructional objectives as much as possible to the individuals involved in the learning process.

The first students' characteristic focused in this study is their ability to comprehend a reading text, which will categorize them into poor and good readers. The second characteristic is their cognitive learning styles, which will determine how they receive and absorb information. Witkin cs. (1971:3) defined cognitive styles as "characteristic self-consistent mode of functioning which individuals show in their perceptual and intellectual activities". The two styles to be considered in this study are Field-Independence, which refers to the ability to detect the parts of a complex whole
(analytical approach). While Field-Dependence refers to the ability to see the field as a whole (global approach). Extensive research done by Witkin and Goodenough (1981), Vernon (1972), and Gardner, Jackson & Messick (1960) found out that in general Field-Independent people are better than Field-Dependent in using their cognitive restructuring ability to comprehend a reading text. Whereas, a Field-Dependent person might depend more on the content and structure of a text, which will hamper his comprehension if the text is unstructured.

THE STUDY

Pilot Phase

The materials, procedures and tests were pilot tested in May and June 1988, to the second semester English Department students of two private universities in Surabaya. While the real study was conducted in the first half of the semester in the school year of 1988/1989 at the English departments of two other private universities in Surabaya.

Design

The Posttest-Only Control Group Design was used in this study. The subjects who were first semester English department students, were assigned to their groups using stratified random sampling. The experimental group got the AO technique, while the DKP technique was presented in the control group. The independent variables are the two reading techniques: AO and DKP. The moderator variables are the reading ability (good vs poor) and the cognitive learning styles (Field-Independent vs Field-Dependent). The dependent variables are the reading achievement tests. At the beginning of the semester, the subjects were given a general reading ability test (Tes Kemampuan Memahami Teks) to categorize them into good and poor readers. They were also given the Group Embedded Figure Test (GEFT) to differentiate them into
Field-Independent and Field-Dependent. After that they were randomly assigned to the AO and the DKP groups.

Materials

The reading material used in this study consists of two units with three passages respectively. The three passages of each unit were related to each other in content. The order of the reading texts for each topic is made similar, that is by starting with a reading text that introduces the topic of each unit, then followed by the second text which focuses on a particular aspect of the topic, and finally the third text that presents a deeper and more specific view of the topic by using examples, illustrations, or concrete applications in daily situations.

The topics for each unit were taken from the fields of Social Sciences and Popular Sciences. Respectively, the topics of the reading materials were about the concept of marriage for the social sciences and the application of science in the field of technology for the popular science material.

AOs in essay form were presented before each unit and each reading text. DKPs in the form of a list of key words were given before each reading passage. The advance organizers as well as the explanation of key words in the DKP was given in bahasa Indonesia so as not to pose additional comprehension problems for the students.

Formulation of the AO and DKP

Due to the abstract concept of Advance Organizers, the writer has attempted to define the organizers in operational terms. To formulate the written organizers the following steps were taken:

1. identify the main concepts/propositions of the reading text
2. present those concepts in a narrative-form context according to the order found in the reading text
3. clarify those concepts by giving definitions, explanations, or examples and illustrations using simple words as much as possible; and the clarification is done in such a way as to show the relationship between one concept to another

4. give additional context that presents a more inclusive background of the topic and that is related to the students' cognitive structure, so as to enable them to compare, assimilate or accommodate the new concepts found in the reading texts with their existing knowledge.

Instrumentation

To measure the students' comprehension of the reading texts, two kinds of tests in the forms of Multiple-Choice and Cloze-Diagram were given right after each reading text. After each unit had been finished, the End-of-Unit Test in the form of a diagram was given to the subjects. The items in the multiple-choice test were categorized according to the levels of Bloom's Taxonomy: Comprehension, Application, and Analysis. Those three levels were considered appropriate to measure the ability of first semester students to grasp the content of a reading text. A sample of the cloze diagram test (Tes Diagram) and the End-of-Unit Test (Tes Akhir Unit) taken from the unit on popular sciences (Unit B) are presented in Appendix I and II.

The Multiple-Choice Scores were obtained from the average of the scores of all six Multiple-Choice Tests. The same thing was done for the scores of the Cloze-Diagram Tests. For the scores of the End-of-Unit Tests, the average was taken from the End-of-Unit Test A and B. While the TOTAL Scores is a combination of the Multiple-Choice, Cloze-Diagram and the End-of-Unit Tests. After that all the raw scores obtained were converted into percentages.

Statistical Analysis

The data was analyzed using a three-way and two-way Analysis of Variance based on 2 x 2 x 2 and 2 x 2 factorial
designs. Statistical analyses were computed using SYSTAT software. An alpha level of .05 was established for significance. The results of the analysis are presented in tables 1 and 2 in Appendix III.

RESULTS

The findings of this study, are as follows:
1. The AO technique could better improve the subjects' reading comprehension, when compared to the DRF technique.
2. The AO technique does not improve reading comprehension when the test items only measure the ability of near transfer, as shown by the Multiple-Choice and the Cloze-Diagram Test.
3. For the Multiple-Choice and Cloze-Diagram tests, the poor readers do not show a remarkable improvement in their comprehension as compared to the good readers. However, in the long run as shown by the results of the End-of-Unit Test, the AO technique could improve the poor readers' comprehension in a significant way.
4. The Field-Independent subjects were significantly better in their reading achievements than the Field-Dependent group. However, as was the case of the poor readers, the AO technique was able to improve the comprehension of the Field-Dependent group in the long run, as shown by the results of the End-of-Unit Test.

SUGGESTIONS

Thus, it is suggested that the AO technique should be used as one of the reading techniques to improve students' comprehension of a reading text. To obtain optimal results for readers with different characteristics, it is recommended to combine the AO technique with other ways of presentations, such as oral explanations, diagrams or other suitable media.

For further studies in the use of Advance Organizers as a prereading strategy, the writer would like to recommend
the following: (1) giving the students a chance to construct their own diagrams consisting of the major concepts found in the passage, as a means to measure the effectiveness of the advance organizer presented before the reading text, (2) comparing the effectiveness of advance organizers as a single component and advance organizers used with other ways of presentations.

REFERENCES


APPENDIX I

UNIT B

TEKS III.

TES DIAGRAM

Instruction: Fill in each number with ONE suitable word from the passage

PROBLEMS OF DEVELOPING NATIONS

1. underemployment

causing

lack of

2. housing

POSSIBLE SOLUTIONS

4. to 5. to 6. to 7.

FACTORS to be considered by developing nations in transferring western technology

FINANCIAL

High cost of:

a) providing 9. machines
b) providing 10. workers to 11. and 12. equipments
c) sending students 13. for 14. and 15. training

ENVIRONMENTAL

16. of 17. and water

Result: local 18. industry may be 19.

SOCIO-CULTURAL

a) providing 20. jobs
b) students 21. may not 22. home
c) dependence on 23. farming 24.

Effect: a 25. in price and 26. of 27. can cause 26. and 29.
d) dependence on modern 30. of 31.

Effect: 32. of 33. ways of 34.

SUGGESTIONS

a) look 35. at the 36.
b) study the 37. of 38. countries and take home the 39.
UNIT B
TES AKHIR UNIT

Instruction: Fill in each number with a suitable WORD / PHRASE from the three passages

SCIENCE

... science
Descriptive science
Applied science

the link between

6... or 7... science

SCIENCE

e.g.
physics

9

SCIENCE

e.g.

2

SCIENCE

4
b)

c)
d)

GOLD SIDES

a) eliminate ...
b) cleaner factories
c) .......... 11

BAD SIDES

a) ....... jobs
b) dull jobs

REASON

a) .........
b) underemployment
c) lack of .......... 17

POSSIBLE PROBLEMS

FINANCIAL

a) need for skilled workers
b) .......... 18
c) .......... 19

SOCIO-CULTURAL

a) fewer jobs
b) .......... 20
c) .......... 21

ENVIRONMENTAL

a) .......... 23
Effect:

a) .......... 24
Effect:

a) .......... 22
Effect:

SUGGESTIONS

look carefully at:

a) .......... 25
b) .......... 26
### APPENDIX III

#### Table I: Achievement Score Means

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>41.4</td>
<td>37.8</td>
<td>45.4</td>
<td>34.4</td>
<td>42.0</td>
<td>36.8</td>
</tr>
<tr>
<td>SCORES</td>
<td>9.3</td>
<td>8.4</td>
<td>7.6</td>
<td>8.0</td>
<td>8.3</td>
<td>9.3</td>
</tr>
<tr>
<td>END of UNIT</td>
<td>51.4</td>
<td>39.0</td>
<td>54.4</td>
<td>37.9</td>
<td>47.7</td>
<td>42.2</td>
</tr>
<tr>
<td></td>
<td>16.5</td>
<td>12.2</td>
<td>14.9</td>
<td>15.1</td>
<td>15.7</td>
<td>17.3</td>
</tr>
<tr>
<td>CLOZE</td>
<td>57.2</td>
<td>58.2</td>
<td>74.7</td>
<td>61.5</td>
<td>71.4</td>
<td>64.1</td>
</tr>
<tr>
<td>DIAGRAM</td>
<td>11.4</td>
<td>11.7</td>
<td>9.2</td>
<td>10.4</td>
<td>9.9</td>
<td>12.0</td>
</tr>
<tr>
<td>MULTIPLE CHOICE</td>
<td>59.9</td>
<td>56.1</td>
<td>67.0</td>
<td>49.2</td>
<td>62.5</td>
<td>53.0</td>
</tr>
<tr>
<td></td>
<td>16.8</td>
<td>14.8</td>
<td>15.3</td>
<td>12.9</td>
<td>19.5</td>
<td>14.1</td>
</tr>
</tbody>
</table>

Notes: A1 = AO group  
A2 = DKP group  
B1 = good readers  
B2 = poor readers  
C1 = Field-Independent group  
C2 = Field-Dependent group

#### Table II: Results of ANOVA

<table>
<thead>
<tr>
<th>Dependent Measures</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>AxB</th>
<th>AxC</th>
<th>BxC</th>
<th>AxBxC</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>F</td>
<td>.17</td>
<td>44.9</td>
<td>5.85</td>
<td>3.04</td>
<td>0.09</td>
<td>0.08</td>
</tr>
<tr>
<td>SCORES</td>
<td>p</td>
<td>&lt;.05</td>
<td>&lt;.01</td>
<td>&lt;.05</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>END of UNIT</td>
<td>F</td>
<td>16.9</td>
<td>25.9</td>
<td>1.12</td>
<td>4.4P</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>&lt;.01</td>
<td>&lt;.01</td>
<td>ns</td>
<td>&lt;.05</td>
<td>ns</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>MULTIPLE CHOICE</td>
<td>F</td>
<td>0.86</td>
<td>46.9</td>
<td>---</td>
<td>1.91</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>ns</td>
<td>&lt;.01</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>CLOZE</td>
<td>F</td>
<td>0.04</td>
<td>---</td>
<td>10.2</td>
<td>----</td>
<td>0.41</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>ns</td>
<td>&lt;.01</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
</tbody>
</table>

Notes: A = treatment groups, AO and DKP  
B = reading ability (good vs poor)  
C = cognitive learning styles (Field Independence vs Field Dependence)  
ns = not significant