THE EFFICACY OF READING USING THE PHYSICAL RESPONSE TECHNIQUE IN SECOND LANGUAGE LEARNING

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RESUMO

O objetivo desta experiência foi testar a eficácia da leitura no estágio inicial do aprendizado de uma segunda língua. A lição usada foi baseada na técnica Total Physical Response, de James J. Asher, e consistiu de 10 emissões diferentes de 1 palavra cada.

Chegou-se à conclusão de que aqueles que possuíam um roteiro e puderam ler-lo durante a aula, obtiveram um resultado 33.5% melhor do que os que não leram.

Uma segunda hipótese testada lidou com a ação versus a não-ação. A diferença nos resultados obtidos pelos grupos de ação versus os grupos de não-ação não chegou a ser significativa.

ABSTRACT

The purpose of this experiment was to test the efficiency of reading in the beginning stage of second language learning. The lesson we used was based on the Total Physical Response technique, and consisted of ten different one-word utterances.

It was found that those who possessed a script and were able to read it during the lesson outperformed those who did not read by 33.5%.

A second hypothesis we tested dealt with acting versus non-acting. The difference in the results obtained by the acting groups versus those who did not act was found to be insignificant.
1. Introduction

Asher et al. (1974) have shown that actually carrying out commands and directions in the second language can be an effective approach to language teaching. In their technique, called Total Physical Response, the learner responds with the appropriate physical actions to the teacher's verbal instructions and his modelling of them. Although it has been shown that learning acquired in this way, relying totally on listening, is readily transferrable to the other three skills, namely speaking, reading, and writing, the Total Physical Response technique itself does not make use of those skills in the initial stages of instruction. The implication seems to be that, at least in the beginning, speaking, reading, and writing do not help, and indeed may interfere with language learning. We hypothesize, however, that for literate adult learners reading can be an effective aid when used in conjunction with the Total Physical Response technique in the beginning stage of second language teaching and learning. This supports the results of experiments done by Lado (1968, 1972), Fink (1971), Hawkins (1971), and Couts (1972), among others, who have shown that the combined presentation of listening and reading contributes to the assimilation of a foreign language.

To test our contention, we designed a controlled experiment in the form of a short lesson based on the Total Physical Response technique followed by a test. We predicted that the reading groups would show better results than the non-reading groups. In addition to this hypothesis, that reading is beneficial, we hoped to test one other hypothesis in this experiment, namely that the physical response itself is a crucial factor in the beginning stages of language learning; that is, we predicted that a group merely watching others perform the commands modelled by the teacher would not learn as well as the performers.

2. Method

Subjects: We conducted our experiment using ten volunteer subjects, all graduate students in Linguistics. None of them had a prior knowledge of Japanese, the language used in the study. There were four native speakers of English and six for whom English was a second language. The person acting as teacher in the study was a native Japanese.

Procedure: Our experiment consisted of four groups as follows:
Groups I and II physically carried out the directions given and modeled by the teacher. Groups III and IV sat and observed. In addition, Groups I and III were provided scripts on which the words being taught were written in Latin-letter transliteration. Groups II and IV had no scripts.

The subjects were seated so that all were able to see, but extra room was provided for the performance of the acting groups. The lesson, consisting of fourteen commands, was given three times: the first time the teacher modeled each command after saying it, and Groups I and II imitated him; the second time was an exact repetition for reinforcement; and the third time the teacher merely sat without modeling while the acting groups performed the commands. Upon conclusion of the lesson, the scripts were collected and the test was given to all four groups.

In the test, the ten Japanese words were pronounced at random to guard against the effects of serial learning. The teacher remained seated throughout the test. All subjects were asked to match the spoken Japanese words to a list of English words printed on an answer sheet.

3. Results

The raw scores of the tests given were as follows:

<table>
<thead>
<tr>
<th>GROUP</th>
<th>SUBJECT</th>
<th>ITEMS CORRECT</th>
<th>GROUP AVERAGES IN ITEMS CORRECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. + read + act</td>
<td>1</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>II. - read + act</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2</td>
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</tr>
<tr>
<td></td>
<td>6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>III. + read - act</td>
<td>7</td>
<td>8</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IV. - read - act</td>
<td>9</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>5</td>
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</tr>
</tbody>
</table>

Table 1 - Raw Scores on a 10 - Item Test
The above group averages are illustrated in Figure 1.

Figure 1 - Graphic Representation of Mean Scores for Each Group

Among these groups, the readers clearly outperformed the non-readers. The difference between the acting and non-acting groups is less clear. The graphs in Figure 2 compare the performance of readers versus non-readers and actors versus non-actors.

Figure 2 - Representation of Mean Scores for Readers, Non-Readers, Actors, Non-Actors
The average score of the readers (6.75) was 33.5% higher than the average score of the non-readers. The average score of the actors (5.5) was only 7.5% greater than that of the non-actors (4.75).

4. Discussion

Our hypothesis that physical response would aid retention was not sustained. Rather, our results were in line with Asher's findings that, for single word items, subjects who acted did not have retention superior to the subjects who did not act (Asher, 1969).

The superior performance of the readers, however, seems to strongly confirm our hypothesis that reading is a positive aid to learning. Our results suggest that reading ought to be an early part of language instruction for every literate learner. We might even go further and suggest that Total Physical Response together with reading is a very effective way to teach ESL/EFL to adults.

We state our conclusions tentatively because of the limitations inherent in the small sample size and the brevity of the lesson device. In the future we would like to expand our testing to consider larger and more diversified groups of adult learners, increased length of utterance, and longer periods of retention.
APPENDIX

Lesson Description

For each item in this lesson, the following procedure will be used:

1. Teacher will give a command.
2. Teacher will perform it.
3. Students will perform it.

Script:

1. tate
2. Ojigioshiro
3. awuke
4. tomare
5. maware
6. unazuke
7. kagame

8. tate
9. tobe
10. awake
11. tomare
12. hisamazuko
13. maware
14. suware

The lesson will be repeated:
Repetition 1: exactly the same.
Repetition 2: commands only with student response.
Teacher does not perform.

Pre-Post-Test

Name:____________________Group:__________Person:__________

DIRECTIONS: As the teacher pronounces each Japanese word, write its number on the blank beside the corresponding English word.

_________bow
_________jump
_________Kneel
_________nod
_________sit
_________squat
_________stand
_________stop
_________turn
_________walk
Teacher's Copy of Test

DIRECTIONS: Pronounce each of the following words with its number, pausing for student response.

1. unazuke
2. kagamo
3. akuke
4. tobe
5. tomare
6. maware
7. hizamazuke
8. Ojigioshiro
9. tate
10. suware


