Two Approaches to Teaching Reading: A Classroom-Based Study

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The purpose of this study was to explore the influence of teaching EFL reading on the progress of students in academic reading classes of a university preparation course. Two approaches were investigated: a "traditional" and a "text-strategic" approach. The same text book was used as the basis for both treatments, and a matched groups pretest/posttest design was used. The study looked at pretest/posttest gain scores for the sample as a whole and for each group, and compared the performances of the groups.

Although the sample was small, and - as expected in a classroom-based study - the full range of variables could not be controlled for, the results of the study indicate that a "text-strategic" approach to the teaching of reading in a foreign language may be superior to the more "traditional" approach. It is suggested that classroom-based studies such as this, though their findings must be tentative, have a useful role

RATIONALE

Full-time classroom teachers generally find their time fully utilized in confronting the everyday challenges of their work. At the same time, however, the conscientious professional keeps in touch with the methodological literature and with new developments in materials. In my own case, in recent years, I have become aware that this has resulted in gradual changes in attitude and approach to teaching reading to advanced students in a university preparation course, without my having at any point stopped to examine my position, either previously or currently held. There have, in fact, been great changes in approaches to the teaching of reading in a non-native language in the recent past. The emphasis has shifted from what is referred to in this article, for want of a more precise definition, as the "traditional" approach (eg Finocchiaro 1958; Lado 1964; Rivers 1968; Allen and Valette 1972) which concentrated on the comprehension of individual passages through the use of exercises which looked at 'bits' or discrete points of which the text was built, in the belief that written text is the sum of its individual parts. In contrast, the recent trend is to exploit the generalizable features of text as these have been made clearer for use through research in psycholinguistics, first language reading developments and discourse analysis (eg. Goodman 1967; Halliday and Hasan 1976; van Dijk 1977; Kintsch and van Dijk 1978; Just and Carpenter 1980; de Beaugrande and Dressler 1981), in order to help learners develop skills for approaching any text. I shall refer here to this as the "text-strategic" approach, a term of my own devising for convenience in referring to these contrasting approaches.

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This article describes a small-scale, classroom-based study conducted to investigate whether there was any evidence to justify an intuitive preference for a text-strategic approach over a traditional approach, insofar as this could be measured in terms of student progress.

RESEARCH DESIGN

The study took place within the normal constraints of a teaching programme, and may therefore be described as *ex post facto* (Hatch and Farhady 1982). However, within those constraints a fair amount of flexibility was possible, as was the advance construction of a research design which offered a reasonable degree of control. I used a pretest/posttest design with matched groups, as shown in Fig. 1.

*Fig. 1: Research Design (a)*

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Pretest

Group A  Group B  B Group C

Posttest
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The same teacher (T1) taught two groups using a different approach for each (Approach 1 = traditional; Approach 2 = text-strategic), while a second teacher (T2) taught the third group by one of the approaches (traditional), thus providing a control for that Approach (Fig. 2). A more satisfactory design would have provided for a control over the other approach also, but the practical programme constraints made this impossible.

*Fig. 2: Research Design (b)*

<table>
<thead>
<tr>
<th></th>
<th>Approach 1 - traditional</th>
<th>Approach 2 - text-strategic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher 1 (Hamp-Lyons)</td>
<td>Group A</td>
<td>Group B</td>
</tr>
<tr>
<td>Teacher 2 (Proulx)</td>
<td>Group C</td>
<td></td>
</tr>
</tbody>
</table>

The hypotheses under investigation were:

(i) that the sample as a whole would progress (i.e. that the mean score of the group as a whole would be higher on the posttest than on the pretest); and

(ii) that the text-strategic treatment group (i.e. Approach 2) would make greater gain scores (i.e. amount of improvement from pretest to posttest) than would the traditional treatment group.
THE SAMPLE

The pretest sample consisted of all students enrolled in Spring Semester, 1982, in the Level 7 (university preparation) course of WESL Institute, Western Illinois University. Enrolment in this course required a TOEFL score of 500-550 (approximately equivalent to an ELTS band of 7) or graduation from WESL Level 6. The course lasted one semester (16 weeks) and met ten hours a week concurrently with a limited number of university credit courses. The academic reading module of the course met two hours a week (once at 08.00 and once at 09.00, the times of the lesson being therefore eliminated as an intervening variable), giving a total of 32 hours for the module, between pretest and posttest.

The subjects in the pretest sample were 24 non-native speakers of English, nine of whom were graduate students and fifteen who were freshman undergraduates. There were fifteen males and nine females. Native languages were:

<table>
<thead>
<tr>
<th>Language</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahasa Malaysia</td>
<td>13</td>
</tr>
<tr>
<td>Korean</td>
<td>3</td>
</tr>
<tr>
<td>Chinese</td>
<td>3</td>
</tr>
<tr>
<td>Thai</td>
<td>2</td>
</tr>
<tr>
<td>Japanese</td>
<td>2</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>1</td>
</tr>
</tbody>
</table>

N = 24

THE PRETEST

The 24 subjects were administered a cloze pretest before group assignments were made. The cloze test consisted of six tests arranged in order of increasing length and difficulty. Passage length varied between 350 and 500 words. Fifty blanks of equal length were inserted in each test, using fifth-word deletion. At least one complete sentence appeared before the first blank, and for the more difficult passages extensive introductory and concluding unmutilated text was given. The texts were selected from S.R.A. materials (S.R.A 1970) after confirming their levels of difficulty using the Fry Readability Scale (Fry 1963). The selection of passages was carried out with the variety of cultures represented in the sample in mind. The passages chosen were considered to be as far as possible culturally neutral for the cultures represented by the sample, to avoid any possibility that members of one culture group might have an advantage over another in their performance on the test. The students were allowed two hours to complete the test, without dictionaries or any other aids, and they were instructed to fill every blank, guessing if necessary. The tests were scored using exact word replacement; spelling errors were accepted if they were not meaning-reducing. The mean score on the pretest was 86.0 (total possible 300.0).
FORMING THE GROUPS

Because of the small size of the sample it seemed advisable to match the groups as far as possible. This was done on the basis of the pretest scores, but also taking into account various administrative constraints. Compared to the mean score for the whole sample of 86.0 on the pretest, the mean scores for the three groups were:

Group A 84.1
Group B 83.9
Group C 90.0

A t-test for related samples showed no significant difference between Groups A and B ($t = .11$) or between Groups A and C ($t = 2.09$), but there was a significant difference between Groups B and C ($t = 2.52$). It had only been possible to construct five sets of closely matched threes. The remaining nine students could not be closely matched in threes, but three well-matched pairs were found and assigned to different groups. The remaining three students had to be assigned to groups without being matched; one of these in particular, who was assigned to Group C, had a score well in excess of that of any other student.

I considered eliminating the nine unmatched students from the study, and performing the analyses on the three well-matched groups of five, but this would have been misleading. The unmatched students were part of the group, part of the teaching situation, and influenced the learning and the results of the study as much as did the well-matched students. Although the statistics may have been purer, I prefer to report on the reality of the situation as it presented itself.

HYPOTHESES

First, it was hypothesised that the sample as a whole would progress (i.e., the mean score would be higher on the posttest than on the pretest for the sample considered as a whole). Because this hypothesis was unidirectional, a one-tailed test would be used to test the hypothesis, and the confidence level was set at 99% ($p < .01$). The second hypothesis - and the one of primary interest - was that the teaching approach used in a group would make a significant difference: specifically, that the mean score of Group B, taught by the text-strategic approach, would increase more that the mean score of Groups A or C. The confidence level here was set at 95% ($p < .05$) on a one-tailed test.

THE ‘APPROACH’ VARIABLE

The two approaches which were used in the study were intended to reflect contrasting practices in the teaching of reading in English as a foreign/second language. The first approach (Approach 1), which I have somewhat arbitrarily labelled “traditional” is associated for me with the structuralist-behaviourist view of language (e.g. Bloomfield 1933; Lado 1964) and the audio-lingual view of language teaching (e.g. Rivers 1968). The second approach (Approach 2), which I have equally arbitrarily labelled “test-strategic”, is associated for me with recent developments in the analysis of discourse and in communicative language teaching/learning theory (e.g. Widdowson 1978).¹ I

¹. See Johnson (1982) for a particularly clear description of the contrast suggested here.
attempted to identify what I believed to be the constructs underlying each of these approaches, as they relate to the teaching of reading in a foreign language, and to capture what I felt were the essential characteristics that each of them would display in the classroom. This was difficult to do, since I could find no fully comprehensive descriptions in the literature.\textsuperscript{2} The table (Table 1) is inevitably idiosyncratic and tentative. It may also be somewhat misleading, since I have presented the two approaches as if they are dichotomous, whereas in practice there have always been and will always be elements of each in the other: it would be more appropriate to think of all approaches as existing along one continuum, with any one teacher operating at some point along that continuum - or more likely at different points along it at different times and in different situations.

\begin{center}
\textit{Table 1: Reading Approaches Contrasted}
\end{center}

\begin{tabular}{ll}
\textit{Traditional (Approach 1)} & \textit{Text-Strategic (Approach 2)} \\
product-centered & process-centered \\
reading is passive (receptive) & reading is active (interpretive, communicative) \\
bound to specific context & generalizable \\
focus on form & focus on meaning \\
schema not considered & schema important \\
reading as a form of behavior & affective domain considered \\
sentence level & discourse level \\
analytic & analytic \\
emphasis on content lexis & synthetic \\
discussion \textit{around} text & emphasis on structure lexis \\
emphasis on facts/details & discussion of text \\
one definition of ‘comprehension’ & emphasis on ideas/generalizations \\
comprehension measured by means of & comprehension measured by varied \\
literal, inferential, critical & activities: questions, logical \\
questions & manipulations (e.g. \textit{reorganization outlining, non-linear} \\
range of responses & \textit{response} etc \\
glosses & no glosses \\
decoding “right” answers & encoding \\
reading aloud (teacher, ?student) & silent reading \\
individual work & groups/pairs: sharing \\
teacher as authority & teacher as facilitator \\
\end{tabular}

\textsuperscript{2} Since this study was completed, Johns and Davies (1983) have published their excellent discussion of TALO (‘text as linguistic object’) and TAVI (‘text as vehicle for information’) which would have informed this study greatly. To some extent their TALO/TAVI contrast parallels my attempted “traditional”/“text-strategic” contrast, but is particularly full and clearly presented and contrasts two distinct uses of text.
I controlled the approach variable in two ways. First, for the traditional groups (Group A: T1; Group C: T2) there was a weekly planning meeting at which the following week's lessons were planned in detail. This involved agreeing on the exercises from the book which would be used, constructing additional activities to be used by both groups, fixing the amount of time to be spent on each activity, agreeing on homework assignments, and generally reaching a mutual strategy on every conceivable treatment question. Second, each teacher observed the other teaching a traditional group once a week during the first half of the semester. The observations were discussed, and we paid particular attention to any tendency towards a text-strategic treatment we noted. While it cannot be claimed that as a result of these attempts at control we were able to prevent distortion of the investigation due to infiltration of the other approach, I feel that we exercised as much control as can realistically be expected in a classroom-based study such as this.

In the two groups which had the same teacher (Groups A and B: T1) but contrasting treatment, conscious attention was paid to maintaining a true contrast between treatments. With the group which was receiving the text-strategic treatment, the questions based on the passage were de-emphasized and discourse features such as the anatomy of the text, cohesion and coherence, anaphoric reference, and logical connectors were emphasized.

Amy Sonka’s *Skillful Reading* (1981) was seen as being suitable for use in the study because it is, relatively speaking, a middle-of-the-road book. While it treats a range of text features and text-strategic skills (e.g. identifying topic sentences, scanning, skimming), it also treats reading traditionally with vocabulary activities and focus on grammatical structure.

In formulating the approach variable and conducting an investigation into the effect of the approach, I was quite aware that much of the time there would be no difference between activities. Furthermore, a large part of the treatment was constrained by the text book, and (in the main) students did the same exercises regardless of which treatment they were receiving. However, I felt that a different methodological construct would provide a sufficiently distinct learning atmosphere that, together with the contrasting treatments of the actual reading passages, I could claim that there was in fact an approach variable operating. The two lesson plans which follow, one for each Approach, exemplify the operational differences between the approaches.

**Sample Lesson Plan for Approach 1 (Traditional)**

Duration: 50 minutes

Preparation: read passage carefully at home (Chapter 2)

Lesson Plan:

- take vocabulary questions (5 minutes)
- ask vocabulary questions (5 minutes) e.g. prism, flashlight, filter,
- ask comprehension questions:
  - a. literal (5 minutes) e.g. which wavelength bends the most? When can you see a rainbow? Why does grass look green?
  - b. inferential (10 minutes) e.g. Why does a desert look yellow? What colours does red reflect? Why do windows have no colour?
  - c. critical (5 minutes) e.g. Why do yellow and blue light form white light? What would happen if you shone a red light on a yellow object? Why are the results of mixing light and paint different? Are they always different?
Quiz: (10 minutes) : using vocabulary in context

Homework: outlining the passage

Sample Lesson Plan for Approach 2 (Text-strategic)

Duration: 50 minutes

Preparation: read the passage (Chapter 2); underline the topic sentence in each paragraph

Lesson Plan:

Quiz: (10 minutes) with the book shut, write the introduction in your own words; then do the same for the conclusion; list all the main points you can remember

Analysis of the structure of text (35 minutes):

a. discussion of similarities and differences between the introductions and conclusions (10 minutes)

b. structure of the body (25 minutes)
   i. pairwork
   ii. class discussion
   iii. organization by levels of generality: general specific specific general

Homework: go through the passage underlining all the example markers.

INTERVENCING VARIABLES

As suggested earlier, the number of variables which could not be even partly controlled was as great as it always is in any research conducted in a naturalistic classroom setting, as opposed to a laboratory setting. While the number of hours of instruction in reading was the same for all students, even such a simple factor as the amount of time spent on the homework was uncontrollable. Some other factors which undoubtedly function as intervening variables were: age (the sample included students aged 18-27); whether or not the subjects were taking university classes concurrently and, if so, how many, and what type (most were taking 4-8 credit hours, but two students were not taking any courses); length of time in the U.S. (about half the students in the sample were new arrivals, while the other half had been in the country for at least four months); major or intended major (the text we used was broadly science-based, and could be expected to be less motivating for a humanities-oriented student); learner style; and motivation. In addition, there certainly existed other intervening variables which have not even been identified. It can only be said that, without intending to deny or diminish their existence, we operated on the assumption that such factors would be randomly distributed (i.e. that in any group the range of influences and differences affecting the data in any direction would be approximately equal).

POSTTEST

The posttest, which was given after all instruction had been completed, was identical to the pretest. When looking at results on the posttest in comparison with those on the pretest, a memory effect was discounted, as there was a sixteen-week interval between pretest and posttest. Practice effect was also discounted as a factor because the subjects did not have any other exposure to cloze procedure during the sixteen weeks.
RESULTS

The mean for the whole sample rose from the pretest mean of 86.0 to 109.7 on the posttest. The mean gain score of 23.7 was significant at the .0005 level (t = -8.5). The first hypothesis, then - that the sample as a whole would progress - was well supported, at a confidence level beyond the .01 level set.

To test the second hypothesis - that the text-strategic treatment would result in larger gain scores than the traditional treatment - the mean gain score and posttest mean of each group were found and compared. Figure 3 shows this, as well as the t-value and the significance of the gain score for each group from pretest to posttest.

Fig. 3: Summary of Pretest/Posttest Data

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>Mean Gain Score</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (T1, traditional approach)</td>
<td>84.1</td>
<td>103.0</td>
<td>18.9</td>
<td>3.8</td>
<td>.005</td>
</tr>
<tr>
<td>B (T1, text-strategic approach)</td>
<td>83.9</td>
<td>115.25</td>
<td>31.35</td>
<td>8.06</td>
<td>.0005</td>
</tr>
<tr>
<td>C (T2, traditional approach)</td>
<td>90.0</td>
<td>110.8</td>
<td>20.8</td>
<td>6.4</td>
<td>.0005</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>86.0</td>
<td>109.7</td>
<td>23.7</td>
<td>8.5</td>
<td>.0005</td>
</tr>
</tbody>
</table>

The group that received the text-strategic treatment, Group B, had a higher posttest mean (115.25) and a larger gain score (31.35) than either of the groups which received the traditional treatment, Groups A and C. The difference between the gain scores of Groups A and B was 12.45, which was significant at the .05 level (t = 2.91); the difference between the gain scores of Groups B and C was 10.55, and was significant at the same level (t = 2.6). In contrast, the difference in the gain scores of groups A and C, which both received the traditional treatment, was only 1.9 and at t = .714 was not significant.

3. For readers who may wish to refresh their memory on research statistics, the editorial to this issue includes an explanation of such terms as t-value and significance.
DISCUSSION

The normal practice on language courses is to give different tests at the beginning and end. This makes it difficult to be confident that students actually progress as a result of the teaching they receive. In this study, a gain score of a mean of 23.7 points on the same test encourages me to believe that the teaching is making a difference. At the same time, it must be remembered that the students were living in an English-speaking environment, and many of them were attending university classes in English, and reading assigned material in other subjects independently. I cannot be sure that it was not simply the effects of living in the environment which led to their progress.

When looking at the gain scores of the three groups from pretest to posttest, and finding such a large difference for Group B, I believe I find a case for the argument that teaching does make a difference, and further, that the different kinds of teaching make more or less difference.

It can clearly be seen, on the raw data as well as in the statistical analyses, that Group B, which received the text-strategic treatment, had the highest mean score on the posttest, despite having had the lowest mean score on the pretest. Group B’s mean rose by 31.35 points, as compared to rises of 18.9 and 20.8 points for Groups A and C respectively, both of which had received the traditional treatment. This difference is statistically significant, and I believe that the results of the analysis suggest that a text-strategic approach to teaching reading is more effective than a traditional approach. It is admitted that, as the principal teacher, I was biased towards the text-strategic approach, and that this bias could have influenced the teaching given to my traditional class (Group A), and therefore its performance. However, the second teacher also taught a traditional class (Group C), and while this class made slightly more improvement, it was also the strongest group to begin with (according to the pretest means) and we have already seen that the relative degree of improvement was not significant. I do not believe that any bias effect which may have been present was sufficient to account for the data.

It must be remembered that this study took place within the real parameters of an ongoing teaching situation. One of the effects of this was to make it impossible to conduct the sort of uncontaminated research which might be carried out under true experimental conditions. I was unable, for example, to have a control group who received no treatment at all, so I can never claim with any certainty that progress made was made as a result of teaching (though I must allow myself to believe it was, for the sake of my own motivation!). I was unable to have a fourth group, which would have been a text-strategic group, so that I could have compared Group B with “Group D” and looked at a possible teacher-effect. In addition, it is well known that in studies of this type it is impossible to be certain that the two treatments are really kept separate. This is even more difficult when the researcher is also a main participant in the study. As stated above, I must accept the possibility of bias: I must also accept that the two treatment conditions (1. “traditional” 2. “text-strategic”) were each infiltrated by the other on occasions, and that, due both to the realities of the teaching situation and the fact that there exists no blueprint for ‘the typical “traditional” reading lesson’ or ‘the typical “text-strategic” reading lesson’ - and there probably never will - I cannot claim that the study contrasted two extremes of approach. Were such a study possible, though I think it unlikely, I would predict that its findings would lend strength to the tentative ones presented here.
One question to which this investigation cannot suggest an answer is whether the apparently more successful text-strategic approach actually helps the students to become better readers than they would have been if taught traditionally, or whether students eventually reach the same level of reading ability as they would have attained by any method (or even no method), but reach it sooner. To answer this question a longitudinal study would be needed. Such a study would follow the whole sample through at least a year of post-treatment reading and ascertain whether the ex-students who had received the traditional treatment eventually caught up with those who had received the text-strategic treatment, whether the students who had made the greatest improvement eventually slipped back to the same level as those with lower posttest scores, or whether the differentials were maintained. Such a question is very interesting, and the results of such a longitudinal study would be very valuable.

It seems clear that the issues raised here deserve further study in teaching situations where a larger population exists and where there is an opportunity to study multiple sections of a reading class using several teachers and two or three treatment conditions. The admissions policy of Western Illinois University made a control group impossible, but there are many universities where English language tuition is not offered, or is voluntary, at the level we were investigating (TOEFL 500+/ELTS 6+), and volunteers could be found to act as a control.

While I cannot claim to have answered my own questions in any absolute sense, I have at least justified to my own satisfaction what had been a merely intuitive preference for the teaching of reading as interaction with the text and as a set of generalizable strategies for handling future texts.

It is inevitable that in ad hoc classroom-based research there will be a number of variables which are uncontrollable, as there was here. I do not see this as a reason to prevent the professionally-concerned classroom teacher from conducting ad hoc investigations into the problems which interest them. The facilities are now available for classroom teachers to investigate and validate for themselves the effectiveness of new developments and techniques as these appear in our field, instead of accepting or rejecting them intuitively. For example, I believe that a large number of small-scale, quasi-experimental or ad hoc studies would contribute to claims about the effectiveness of an approach to teaching advanced EFL reading, or the influence of teacher style, or any other factor that was sufficiently investigated. Such studies would be as powerful as claims resulting from large-scale, highly controlled, experimental studies conducted by funded researchers. I believe that investigations of both types have a contribution to make to increasing pedagogic professionalism.

ACKNOWLEDGEMENTS

This article is based upon a study conducted at WESL Institute, Western Illinois University, while I was Curriculum Coordinator there, with the assistance of Greg Proulx, a lecturer at WESL Institute. An earlier paper, An Investigation of the Significance of Methods/Teacher Variables in the Reading Comprehension Course was presented at the 1982 TESOL Summer Meeting by Hamp-Lyons and Proulx, and appears as 'A Comparison of Two Methods of Teaching Advanced ESL Reading' in ERIC (ED 227 678). The comments of H. Douglas Brown, Barry Taylor, Alan Davies and Lyle Bachman have been very helpful.
REFERENCES


