

Possible Effects of Strategy Instruction on L1 and L2 Reading

Reyhan Salataci
Istanbul Technical University

and

Ayşe Akyel
Bosphorus University

Abstract

The present study investigates the reading strategies of Turkish EFL students in Turkish and English and the possible effects of reading instruction on reading in Turkish and English. The study addresses the following questions: a) Does strategy instruction in EFL reading affect EFL reading strategies and reading comprehension in English? b) Does strategy instruction in EFL reading affect reading strategies in Turkish? The participants consisted of 8 Turkish students enrolled in a pre-intermediate level class of a one-year intensive English course offered at a Turkish-medium technical university. The data came from think-aloud protocols, observation, a background questionnaire, a semi-structured interview and the reading component of the PET (the Preliminary English Test). The results indicated that strategy instruction had a positive effect on both Turkish and English reading strategies and reading comprehension in English.

Keywords: reading strategies, comparison of L1 and L2, reading instruction, strategy instruction, reading comprehension, Turkish reading

Introduction

How readers extract meaning from a text has long been a focus of attention because the process of extracting meaning gives us invaluable information about readers' cognitive processes during reading. Reading researchers usually divide reading strategies into two major categories: cognitive and metacognitive.

Cognitive Strategies in Reading

Cognitive strategies aid the reader in constructing meaning from the text. In general, studies in both first language (L1) and second language (L2) reading research provide a binary division of cognitive strategies as *bottom-up* and *top-down* (e.g., Block, 1986; Carrell, 1989; Davis & Bistodeau, 1993).

According to Aebbersold and Field (1997), during reading, readers' minds repeatedly engage in a variety of processes. Using bottom-up strategies, readers start by processing information at the sentence level. In other words, they focus on identification of the meaning and grammatical category of a word, sentence syntax, text details, and so forth. As they process information that each sentence gives them, they check to see how this information fits, using top-down strategies such as background knowledge, prediction, getting the gist of a text, and skimming. (Barnett, 1988; Carrell, 1989).

Metacognitive Strategies in Reading

Metacognitive strategies are strategies that function to monitor or regulate cognitive strategies (Devine, 1993; Flavell, 1981). They include "*checking* the outcome of any attempt to solve a problem, *planning* one's next move, *monitoring* the effectiveness of any attempted action, *testing, revising, and evaluating* one's strategies for learning" (Baker & Brown, 1984, p. 354). In other words, skimming a text for key information involves using a cognitive strategy, whereas assessing the effectiveness of skimming for gathering textual information would be a metacognitive strategy (Devine, 1993, p. 112).

In L1 and L2 contexts, many studies have been conducted on the use of cognitive strategy instruction as well as the effects of metacognitive strategy instruction on L1 and L2 reading. The present study focuses on the effects of metacognitive strategy instruction.

The Effects of Metacognitive Strategy Instruction on L1 and L2 Reading

Studies conducted on reading instruction and reading strategies (e.g., Bereiter & Bird, 1985; Carrell, 1985; Carrell, Pharis, & Liberto, 1989; Cotterall, 1990; Palincsar & Brown, 1984) indicated that non-proficient L1 and L2 readers either don't possess knowledge about strategies or mainly engage in bottom-up strategies. The findings of these studies also indicate that strategy instruction with a focus on comprehension monitoring can help less skilled readers overcome their difficulties in reading. The types of strategy instruction used in these studies mainly consist of teacher modelling of the strategies followed by student practice in the form of group work.

Bereiter and Bird in their study in the L1 context (1985) identified four repair strategies: restatement, re-reading, demanding relationship, and problem formulation. Using these four strategies, they conducted an experimental study which compared the effects of instruction consisting of modelling the reading strategies and explanation to instruction only modelling the strategies. The "modelling-plus-explanation" instruction included an explanation of situations in which the four strategies mentioned above could be used as well as the modelling of these strategies. In other words, the students were both helped to understand and imitate these repair strategies which led to comprehension monitoring. As a result of the study, the experimental group receiving modelling and explanation scores significantly higher on the comprehension post-test than the control group receiving only modelling. Bereiter and Bird concluded that students will not readily acquire reading strategies simply by imitating models; they also need comprehension-monitoring activities which consist of recognising comprehension problems and selecting repair strategies.

In another study in the L1 context, Palincsar and Brown (1984) analysed the effects of helping young L1 learners with special problems by teaching them to monitor comprehension. They called this instruction "Reciprocal Teaching." It trained the students in the use of four strategies: clarifying, identifying the main idea of a section of text, summarising, and predicting. During instruction, the teacher modelled the use of each strategy. Then the students were divided into groups and a student was assigned the role of the teacher and modelled the use of these four strategies as they read a text and conducted a group discussion on the use of these strategies. At the end of the instruction, the students were given a comprehension test. The experimental group which was exposed to this particular instruction scored higher than the control group which was not exposed to it.

Carrell et al. (1989) conducted a study in the L2 context to examine the combined effects of cognitive and metacognitive strategy instruction on reading comprehension. High-intermediate level adult ESL students of varied native language backgrounds participated in the study. The students were trained either in semantic mapping or the experience-text-relationship (ETR) method to activate background knowledge. Each group of students also received training in metacognitive awareness and regulation of the two strategies. Results showed that the combined effects of metacognitive and cognitive strategy instruction were effective in enhancing reading comprehension.

In an earlier study, Carrell (1985) found that overt teaching of the rhetorical organisation of texts facilitated reading comprehension of English. She conducted a training study with 25 high-intermediate proficiency English as a second language (ESL) students. Carrell divided the students into an experimental and a control group. The experimental group received five successive one-hour training sessions. The training covered the four major expository discourse types (comparison, causation, problem/solution, and description). At the end of the training, the students receiving instruction on text organisation recalled more idea units (a single clause consisting of main, subordinate, adverbial, and relative clauses) than the control group. Modelling her study on Carrell's study, Raymond (1993) also conducted a strategy instruction in the ESL context on text structure and obtained positive results on the comprehension post-test.

Another study that examined the possible effects of metacognitive strategy instruction on reading processes and reading comprehension was conducted by Cotterall (1990). She replicated Palincsar and Brown's (1984) study conducted in the L1 context. Cotterall analysed the effects of metacognitive strategy instruction on four Japanese and Iranian ESL learners. The findings indicated that the learners benefited from the strategy instruction. Song (1998) also replicated Palincsar and Brown's study in the English as a foreign language (EFL) context and found that strategy training enhanced the reading ability of Korean EFL college learners.

Auerbach and Paxton (1997) also brought metacognitive awareness training into their L2 reading classes through pre- and post-course reading interviews, reading comprehension questionnaires, strategy awareness questionnaires, reading inventories, and think-aloud protocols. The results indicated that the students' metacognitive awareness increased at the end of this one-semester awareness-raising program.

The purpose of the present study is to examine how strategy instruction affects pre-intermediate Turkish EFL students' reading strategies in Turkish and English. In doing so, it attempts to investigate whether the results obtained will confirm the findings of previous studies conducted in ESL/EFL educational settings.

Method

The study aims to explore the possible effects of strategy instruction on reading strategies in Turkish and EFL and reading comprehension scores in EFL. Specifically, the study addresses the following research questions:

1. Does strategy instruction in EFL reading affect EFL reading strategies employed by pre-intermediate Turkish EFL students and their reading comprehension scores in English?
2. Does the strategy instruction in EFL reading affect reading strategies in Turkish?

Participants

The participants in this study consisted of 20 students enrolled in pre-intermediate level classes of a one-year intensive English course offered at the foreign language department of the Turkish-medium Istanbul Technical University. All the students participated in the strategy instruction and took two English reading comprehension tests: one at the beginning and one at the end of instruction. However, only 8 of the students volunteered to participate in the think-aloud component of the research.

The Reading Strategy Instruction

All the students were given a 4-week (3 hours a week) course on reading strategies. The aim of the instruction was to help the students to (a) activate and/or to develop their background knowledge of the text using the experience-text-relationship (ETR) method, and (b) monitor their comprehension and become aware of the strategies they employed during the reading process through Reciprocal Teaching method.

Experience-Text-Relationship (ETR)

ETR was found to be an effective method for helping students to use their background knowledge by Au (1979) who used it in an L1 context and by Carrell et al. (1989) who used it in an L2 context. It has three steps: experience (E), text (T), and relationship (R). In the first step (E), the teacher starts a discussion to activate students' background knowledge about the topic of the passage to be read and to motivate them to read. In the second step (T), the teacher asks the students to read short parts of the text and asks questions on the content of the text. In this way, the teacher tries to make sure that they understand what they read. In the third step (R), the students are encouraged to relate the content of the text to their personal experiences and knowledge. In other words, they are encouraged in personal engagement. During the reading of

the texts, the teacher tries to model the cognitive processes involved in the comprehension of the text.

Reciprocal Teaching

The second method, namely Reciprocal Teaching, was first developed by Palincsar and Brown (1984) in the L1 (English) context and was found to be effective in improving L1 students' reading comprehension and comprehension monitoring. Then this method was used in the ESL context by Cotterall (1990, 1993) and in the EFL context by Song (1998).

The general procedure in reciprocal teaching consists of students and teachers taking turns in leading a dialogue concerning the use of a reading strategy during the reading of the text. The teacher's modelling of the strategy prepares all the students for the role of group leader who will demonstrate the strategy use. In the next step, the teacher assigns one of the students to be the group leader. The students are constantly reminded that the aim of these activities is to help them improve and monitor their own comprehension.

The Instructional Procedure

Each session of the 4-week course included the following stages similar to those in the Cotterall (1990) study:

1. The students and the teacher looked at the title of the selected text and made predictions about the likely content of the passage, based on the title. The teacher encouraged the students to activate their background knowledge related to the content of the text.
2. The class was divided into groups of three or four. Before they started reading the passage, the teacher read the first paragraph and demonstrated how to (a) summarise and find the main ideas in that paragraph, (b) predict what will come next, and (c) seek clarification of any comprehension difficulties. At this stage, some repair strategies were introduced to the students such as re-reading problematic parts, reading on until the meaning becomes clear, using the context to guess the meaning of unknown words, visualising the event in the text, and asking the teacher or friends for help. Then one of the students in each group volunteered or was asked to become group leader and followed the procedure described.
3. The teacher observed each group and provided further explanations about the procedures and/or use of strategies and encouraged students to take part in the activity.
4. As mentioned earlier, the steps followed in this study were generally similar to those in the Cotterall (1990) study. In addition, as part of the class activities, the students were also given a worksheet requiring them to write down (a) their predictions, (b) the questions they asked to locate the main ideas, (c) their summaries, and (d) their comprehension problems and possible ways of solving the problems they faced while they were reading the passage. In a way, these worksheets provided a written record of the progress of each student during the strategy instruction.

5. After the text was finished, the whole class discussed the main ideas together. The teacher especially encouraged the students to relate the content of the text to their personal experiences in line with the aims of ETR. Following Cotterall's (1990) instructional model, the students were allowed to use their mother tongue (Turkish) if they asked to do so to make it easier for them to participate in the discussion.
6. Worksheets containing the same type of exercises described in step 4 were also given to the students for homework to apply in a different text.

Tasks and Data Collection

The data for the study came from a background questionnaire, the reading tasks and think-aloud protocols, observation, a semi-structured interview, and the reading component of the PET (the Preliminary English Test). All the passages were basically about descriptions of places. The information about the students' background knowledge about the texts was gathered by the researcher before the experiment through discussions with the students. Moreover, she found that they were familiar with the descriptive mode both in Turkish and English. In this way the researcher tried to avoid the effects of unfamiliar rhetorical organisation and content knowledge as possible confounding factors (Carrell, 1985; Carrell & Eisterhold, 1983).

The participants were asked to think aloud in front of a tape recorder as they read four passages, two before and two after the strategy instruction. In other words, before the instruction, the participants read one English and one Turkish text, and again after the instruction they read one Turkish and one English text. Since the think-aloud task was a new experience for the students, two consecutive sessions were organised prior to the first protocol recording.

Two different versions of the reading component of the PET were given, one before and one after the instruction, to see whether the instruction affected their reading comprehension scores.

Data Analysis

Information on the students' previous instruction and current exposure to English was analysed through a background questionnaire. Oral responses to interview questions were also transcribed and examined to support the data obtained from the analyses of the think-aloud protocols. To cross-validate the findings, the participants' observable behaviour during the strategy instruction and the think-aloud tasks was noted down.

The recorded think-aloud protocols were transcribed and coded using Davis & Bistodeau's (1993) basic coding scheme, which was a modified version of Block's (1986) coding scheme (Appendix A). However, for the purposes of the study, a few modifications were made on Davis and Bistodeau's coding scheme. (These are indicated with an * in Appendix A) There are three main categories: a) *bottom-up* strategies; b) *top-down* strategies; and c) *metacognitive* strategies.

For the statistical analyses of the data obtained, the Statistical Package for Social Sciences (SPSS) was used. In accordance with the objectives of the study, Wilcoxon Matched-pairs Signed-rank tests were computed. The level of significance was set at .05.

Results and Discussion

To see whether the instruction affected the reading strategies in Turkish and English, the frequencies with which the participants used reading strategies in Turkish and English before (henceforth TR1 and ER1) and after instruction (henceforth TR2 and ER2) were compared.

The Impact of the Reading Strategy Instruction on Reading Strategies in Turkish and English

Bottom-up strategies. As indicated in Tables 1 and 2, the students employed fewer bottom-up strategies after instruction. The decrease in use of bottom-up strategies might be due to the reading strategy instruction wherein the students were encouraged to get the overall meaning of the text through the practice of strategies like finding the main ideas and summarising. The participants questioned the meanings of clauses or sentences less frequently in ER2 than in ER1 at the significance level of $p < .05$. However, there was a statistically non-significant increase in the frequency with which the students utilised intrasentential features in TR2.

Table 1: *Reading in Turkish before and after the Instruction*

Bottom-up

Measured Variable	Pre- or Posttest	N	Mean Rank	Mean	SD	Z value
Individual Word Focus	pre	8	4.00	3.63	4.17	0.33
	post	8	4.00	3.13	2.95	
a) <i>Questioning Meaning of Word</i>	pre	8	3.00	2.00	2.98	0.31
	post	8	4.50	1.50	1.77	
b) <i>Using Dictionary</i>	pre	8	0.00	0.00	0.00	0.00
	post	8	0.00	0.00	0.00	
Intrasentential Features	pre	8	1.50	0.13	0.35	0.80
	post	8	2.25	0.63	1.41	
a) <i>Question Clause or Sentence</i>	pre	8	1.50	0.13	0.35	0.80
	post	8	2.25	0.50	1.07	
b) <i>Question Grammatical Structure</i>	pre	8	0.00	0.00	0.00	1.00
	post	8	1.00	0.13	0.35	
Restatement	pre	8	4.75	4.75	3.11	0.84
	post	8	3.00	3.38	2.39	
a) <i>Paraphrasing</i>	pre	8	4.00	2.00	2.00	1.21
	post	8	1.5	1.13	0.35	
b) <i>Rereading</i>	pre	8	4.38	2.75	1.49	0.59
	post	8	3.5	2.25	2.38	

Top-Down

Measured Variable	Pre- or Posttest	N	Mean Rank	Mean	SD	Z value
Prediction	pre	8	0.00	2.25	1.91	*2,36
	post	8	4.00	6.25	5.57	
Confirm./Modifi. of Predict.	pre	8	3.00	0.38	0.74	1.57
	post	8	3.60	1.13	0.84	
Inferences	pre	8	4.75	3.38	2.72	1.19
	post	8	4.42	4.75	2.44	
Prior Knowledge	pre	8	0.00	3.88	3.98	*2,25
	post	8	4.50	11.25	4.65	
Text Order	pre	8	4.50	0.75	1.04	0.53
	post	8	2.00	0.63	0.92	
Question./Assess./Comment.	pre	8	2.50	2.13	1.36	1.15
	post	8	4.00	4.25	5.09	
Personal Comment	pre	8	3.00	1.25	1.28	1.26
	post	8	5.4	3.38	4.57	
Skimming / Scanning	pre	8	0.00	2.75	2.05	*2,20
	post	8	3.50	6.25	6.59	
Reference	pre	8	0.00	0.63	0.92	*2,20
	post	8	3.50	3.38	2.83	
Visualising	pre	8	3.33	1.00	1.20	0.67
	post	8	2.50	0.63	1.41	
Summarising	pre	8	1.00	2.75	2.32	*2,38
	post	8	5.00	5.63	3.16	

Metacognitive

Measured Variable	Pre- or Posttest	N	Mean Rank	Mean	SD	Z value
Comments onTask	pre	8	3.50	0.38	1.06	0.54
	post	8	2.17	0.63	0.74	
Comments on Behaviour	pre	8	3.67	3.75	2.87	0.10
	post	8	3.33	3.50	2.33	

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 2: *Reading in English before and after the Instruction*

Bottom-Up

Measured Variable	Pre- or Posttest	N	Mean Rank	Mean	SD	Z value
Individual Word Focus	pre	8	3.00	10.50	6.70	0.94
	post	8	6	9.25	6.52	
a) <i>Questioning Meaning of Word</i>	pre	8	4.60	5.63	3.54	0.70
	post	8	4.33	4.88	4.39	
b) <i>Using Dictionary</i>	pre	8	3.90	2.63	2.67	*1,88
	post	8	1.50	0.63	0.74	
Intrasentential Features	pre	8	4.00	2.63	2.20	*2,36
	post	8	0.00	1.00	1.77	
a) <i>Question. Clause or Sentence</i>	pre	8	3.50	1.88	1.36	*2,20
	post	8	0.00	0.63	0.92	
b) <i>Question Grammatical Structure</i>	pre	8	2.00	0.75	1.39	1.60
	post	8	0.00	0.38	1.06	
Restatement	pre	8	3.90	8.38	5.48	0.92
	post	8	4.25	7.38	4.44	
a) <i>Paraphrasing</i>	pre	8	2.00	1.88	2.17	0.36
	post	8	4.00	1.75	3.28	
b) <i>Rereading</i>	pre	8	3.50	6.50	4.31	0.73
	post	8	3.50	5.13	3.18	
Translating	pre	8	2.83	1.13	1.13	0.26
	post	8	3.25	1.00	1.31	
Translating and Restating	pre	8	2.75	3.25	3.66	0.1
	post	8	5.00	3.00	3.25	

Top-Down

Measured Variable	Pre- or Posttest	N	Mean Rank	Mean	SD	Z value
Prediction	pre	8	1.00	1.13	1.13	*2,19
	post	8	4.50	3.63	2.00	
Confirm./Modific.of Predict.	pre	8	1.00	0.13	0.35	1.06
	post	8	2.50	1.00	1.85	
Inferences	pre	8	1.5	2.13	1.46	*1,88
	post	8	3.9	4.00	1.77	
Prior Knowledge	pre	8	0.00	1.18	1.83	**2,52
	post	8	4.50	9.00	5.45	
Text Order	pre	8	2.25	0.38	0.74	0.80
	post	8	1.50	0.13	0.35	
Question./Asses./Comment.	pre	8	4.50	2.13	2.42	0.63
	post	8	4.50	3.00	3.59	
Personal Comment	pre	8	0.00	0.63	0.92	1.60
	post	8	2.00	1.38	2.00	
Skimming / Scanning	pre	8	1.50	1.38	1.77	1.61
	post	8	3.58	2.38	2.67	
Reference	pre	8	2.00	0.63	0.52	0.94
	post	8	5.00	2.13	3.18	
Visualising	pre	8	3.50	0.25	0.71	1.07
	post	8	2.88	0.88	1.13	
Summarising	pre	8	0.00	1.13	0.35	*2,36
	post	8	4.00	3.75	2.38	

Metacognitive

Measured Variable	Pre- or Posttest	N	Mean Rank	Mean	SD	Z value
Comments on Task	pre	8	3.00	0.50	0.76	0.00
	post	8	1.50	0.50	0.54	
Comments on Behaviour	pre	8	1.00	6.25	3.85	*2,38
	post	8	5.00	12.63	5.32	

* $p < .05$ ** $p < .01$ *** $p < .001$

Another interesting result is that when they read in English, the students used the dictionary less in the second English text in order to find the meanings of unknown words ($p < .05$). Instead, they tried to figure out the meanings or skipped the difficult words more frequently. Moreover, the students focused on the grammatical structures of the sentences and translated less frequently in ER2.

Top-down strategies. According to the results (see Tables 1 and 2), the students employed the strategies of prediction, prior knowledge, skimming/scanning, reference and summarising more frequently in TR2 than in TR1 ($p < .05$). Other top-down strategies, excepting the text order and the visualising strategy, were also used more frequently in TR2 than in TR1. However, these differences were not statistically significant.

In the case of ER2, similar findings were obtained in terms of the individual top-down strategies. Specifically, the following strategies were utilised more frequently in ER2 than in ER1: prediction ($p < .05$), making inferences ($p < .05$), using prior knowledge ($p < .01$) and summarising ($p < .05$; see Table 2).

According to the findings, the 4-week reading strategy instruction in L2 had a positive impact on the use of top-down strategies in Turkish as well as in English. The results showed that in both languages the participants focused on prediction, the use of background knowledge, and summarising more frequently after the instruction than before the instruction. The reason may be the fact that during the strategy instruction, the students practised strategies such as activating background information, predicting the likely content of the texts, finding the main ideas, and summarising.

Metacognitive strategies. As far as the metacognitive strategies are concerned, the students generally made more comments after the instruction on their reading behaviour and/or process. In other words, they expressed awareness of their behaviour, monitored their comprehension, and verbalised their successes or failures in comprehension and their solutions to the failures in comprehension when they read both in Turkish and English. In ER2, the frequency with which the students employed the strategy of commenting on behaviour and process was higher at the significance level of $p < .05$.

The Impact of the Instruction on the EFL Reading Comprehension Test Scores

To see whether the instruction affected the students' reading comprehension scores, the two versions of the reading component of the PET were given to the students as pre- and post-tests. In accordance with the objectives of the study, Wilcoxon Matched-pairs Signed-rank tests were computed. The results indicated that there was a significant difference between the mean scores the students obtained for the pre- and post-test at the level of $p < .01$ (see Table 3). The findings of the test scores suggest that the strategy instruction probably had a positive effect on their reading comprehension in English.

Table 3: *The Reading Component of the PET (Paired Samples Correlation)*

Test Version	N	Mean	SD	Significance (2-tailed)
Pretest	8	19.1	3.97	.012**
Posttest	8	25.37	3.2	

* $p < .05$ ** $p < .01$ *** $p < .001$

Conclusion

The results of the study indicate that the reading strategy instruction which the participants were exposed to in English affected their use of reading strategies in Turkish and English, suggesting that the process of transfer is bi-directional and interactive. As a result of the instruction, the strategies of prediction, summarising, and using prior knowledge were utilised significantly more frequently both in Turkish and in English after the instruction. These were the strategies that were practised in the strategy instruction implemented in this study. Thus, these results concur with the findings of the studies of Bereiter and Bird (1985), Cotterall (1990), and Palincsar and Brown (1984) in that there was a significant increase in the frequency with which the students employed the strategies they practised after the instruction. Moreover, the frequencies with which the participants employed metacognitive strategies were statistically higher during the reading process in English after the instruction.

Furthermore, the results of the reading component of the PET indicated that the instruction they were exposed to increased their reading comprehension scores. This finding supports those of the Cotterall (1990), Carrell et al. (1989), and Song (1998) studies.

The findings of the study offer several pedagogical implications for reading lessons in EFL/ESL contexts. First, the think-aloud method provides teachers with an excellent means to evaluate students' comprehension processes and makes their strengths and weaknesses visible and thus allows them to help students adjust their strategies. Second, especially readers with lower level language proficiency might benefit from an instructional procedure such as Reciprocal Teaching and ETR where they learn to monitor their comprehension and use their background knowledge with the help of a teacher who models the steps of the instructional process, and where they discuss their strategies while reading the text. Raising students' awareness about when, where, and how to use reading strategies obviously can make them "strategic" readers (Paris, Lipson, & Wixon, 1983).

As a result of the discussions with the students, it was found that the selection of the texts should be based on learners' interests and background knowledge. Moreover, based on the experience of the researchers during the present study, a specific time limit should be set since reading each text within a context of interactive dialogue is laborious and time-consuming. For example, during a one-month course of strategy instruction, the researchers found out that due to the fact that there was no time limit set for the interactive dialogue, it took a lot of time to process each text. For this reason, the students got bored towards the end of the sessions and they lost interest in the discussions.

The findings and pedagogical implications of this study should be viewed in light of its limitations. First, although the think-aloud protocol technique is a widely used method to investigate the reading processes of learners, sometimes students do not report all the strategies they employ, especially in their L1. Second, as is the case with most process studies in the field, it is difficult to draw strong generalisations due to the limited number of students.

The reading strategy instruction course was given to 20 students. For the purposes of the study, these 20 students were divided into five groups. It was again time-consuming and at times difficult for the instructors to guide the groups during the activities planned for the course because instruction entailed visiting each group, monitoring, and giving help when needed. For this reason, the instruction would yield better results with smaller classes.

The reading teacher in this kind of instruction assumes the role of a guide, model, or stimulator rather than the provider of the correct answers to comprehension questions. Basing reading lessons on process may result in a dynamic classroom environment where students enjoy discussing the texts in group interaction and learning from each other's experiences. It also results in a less stressful classroom atmosphere.

References

- Aebersold, J. A., & Field, M. L. (1997). *From reader to reading teacher*. Cambridge: Cambridge University Press.
- Auerbach, E. R., & Paxton, D. (1997). It's not the English thing: Bringing reading research into the ESL classroom. *TESOL Quarterly*, 31(2), 237-261.
- Au, K. H-P. (1979). Using the experience-text-relationship method with minority children. *The Reading Teacher*, 32, 677-679.
- Baker, L., & Brown, A. L. (1984). Metacognitive skills in reading. In D. Pearson, M. Kamil, R. Barr, & P. Mosenthal (Eds.), *Handbook of Reading Research* (pp. 353-394). New York: Longman.
- Barnett, M. A. (1988). Reading through context: How real and perceived strategy affects L2 comprehension. *The Modern Language Journal*, 72(2), 150-162.
- Bereiter, C., & Bird, M. (1985). Use of thinking aloud in identification and teaching of reading comprehension strategies. *Cognition and Instruction*, 2(2), 131-156.
- Block, E. (1986). The comprehension strategies of second language readers. *TESOL Quarterly*, 20(3), 463-494.
- Carrell, P. L. (1985). Facilitating ESL reading by teaching text structure. *TESOL Quarterly*, 19, 727-757.

- Carrell, P. L. (1989). Metacognitive awareness and second language reading. *TESOL Quarterly*, 73(2), 121-134.
- Carrell, P. L., & Eisterhold, J. C. (1983). Schema theory and ESL reading pedagogy. *TESOL Quarterly*, 17, 553-573.
- Carrell, P. L., Pharis, B. G., & Liberto, J. G. (1989). Metacognitive strategy training for ESL reading. *TESOL Quarterly*, 20, 463-494.
- Cotterall, S. (1990). Developing reading strategies through small group interaction. *RELC Journal*, 21(2), 55-59.
- Cotterall, S. (1993). Reading strategy training in second language contexts: Some caveats. *Aral*, 16(1), 71-82.
- Davis, J. N., & Bistodeau, L. (1993). How do L1 and L2 reading differ? Evidence from think aloud protocols. *The Modern Language Journal*, 77(4), 459-471.
- Devine, J. (1993). The role of metacognition in second language reading and writing. In G. Joan and L. I. Carson (Eds.), *Reading in the composition classroom, second language perspective* (pp. 105-130). Boston: Heinle and Heinle Publishers.
- Flavell, J. H. (1981). Cognitive monitoring. In W. P. Dickson (Ed.), *Children's oral communication skills* (pp. 35-60). New York: Academic Press.
- Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-monitoring activities. *Cognition and Instruction*, 1(2), 117-175.
- Paris, S. G., Lipson, M. Y., & Wixon, K. K. (1983). Becoming a strategic reader. *Contemporary Educational Psychology*, 8, 293-316.
- Raymond, M. (1993). The effects of structure strategy training on the recall of expository prose for university students reading French as a second language. *Modern Language Journal*, 77, 445-458.
- Song, M. (1998). Teaching reading strategies in an ongoing EFL university reading classroom. *Asian Journal of English Language Teaching*, 8, 41-54.

Appendix A

The Coding Scheme Adapted from Davis and Bistodeau (1993) and Modified by the Researcher in Line with the Aims of this Particular Study

Bottom Up Strategies.

1. **Individual Word Focus:** The readers' attempts to understand the meanings of individual words.
 - a. **Questioning the meaning of a word** *: "*Burda 'poverty' nin anlamını bilmiyorum.*" (I don't know the meaning of "poverty" here.)
 - b. **Using dictionary** *
2. **Intrasentential Features:** The readers' attempts to understand the meaning or structure of a clause or sentence.
 - a. **Questioning meaning of a clause or sentence** *: "*If you are Swiss, you can afford it. İsviçreli olsan bunu ödersin gibi bir şey mi pek çıkartamadım.*" (If you were from Switzerland, you could pay it, or something. I couldn't understand it well.)
 - b. **Questioning grammatical structures** *: "*What is true is that...bu kullanım bana yeni bilmiyorum, yani iki cümleyi bağlamış gibi.*" (This structure is new to me, I don't know this, it combines these two sentences, I think.)
3. **Restatement:** The reader restates the content by paraphrasing or rereading.
 - a. **By paraphrasing one sentence:** "*No that is not true, but what is true is that the standard of living is much higher than over here.*" (Their standard of living is much higher than his country.)
 - b. **By re-reading a text segment more than once**
4. **Translating a word or a phrase into L1:** The reader translates from English into Turkish.
 - a. "*Tokyo is an ugly city.*" (*Ugly çirkin demek.*)
5. **Translating and Restating one sentence:** The reader translates or paraphrases the sentence.
 - a. "*Switzerland might be the most beautiful place but you have to pay for it.*" *Güzel yer ama bunun için para ödemen gerekiyor.*" (It's a beautiful place but you must pay for it.)

Top Down Strategies.

6. **Prediction:** The reader predicts the likely content of the succeeding portions of the text.
 - a. "*Malta'yı kısa olarak tanıtacak ve bazı özelliklerini söyleyecek herhalde.*" (I think the writer will tell us about Malta shortly and talk about some of its characteristics.)
7. **Confirmation (or Modification) of Prediction:** The reader confirms or rejects the prediction he has made about the content of the succeeding portion of the text.

- a. *"Zaten tahmin etmistim ilk paragraftan sonra güzelliklerinden bahsedeceğini." (I guessed before that the writer would talk about its beauties.)*
8. **Inferences:** The reader makes an inference or draws a conclusion about the content.
- a. *"Tokyo'nun karışık, büyük ve kozmopolitan bir yer olduğundan bahsediyor." (The writer talks about how complicated, big and cosmopolitan Tokyo is.)*
9. **Associations with Prior Knowledge:** The reader uses his/her prior knowledge and experience about the content of the text.
- a. *"Malta bildiğim kadarıyla bir ada ve İtalya'nın yakınlarında ucuz bir tatil beldesi." (As far as I know Malta is an island and it is a cheap holiday resort near Italy.)* Text order: The reader distinguishes between the main points and supporting details and comments on the organisation of the ideas.
- b. *"Zaten ana fikir bu ötekiler ayrıntıydı." (This is the main point, the others were details.)*
10. **Questioning, Assessing, Commenting on the Information in the Text:** The reader comments on the significance of content, questions the information in the text.
- a. *"The writer uses such words so that we have a better imagination in our mind."*
11. **Personal Comments :** The reader reacts emotionally to the text.
- a. *"İsviçre'dene tip arabalar var diye düşündüm çünkü arabaları çok severim." (I thought of the cars made in Switzerland because I like cars very much.)*
12. **Skimming/Scanning Reading Material for a General Understanding *:** The reader skims/scans the whole or some portion of the text for a general understanding.
13. **Reference to the Antecedent Information:** The reader connects new information with the previously stated content.
- a. *"İlk paragrafta yazar Tokyo'nun çirkinliklerinden bahsetmişti." (The writer talked about the ugliness of Tokyo in the first paragraph.)*
14. **Visualising the Information in the Text *:** The reader forms an image about the content in his/her mind.
- a. *"Antalya gibi bir yer canlandı gözümde." (I visualised a place like Antalya..)*
15. **Summarising *:** The reader summarises the whole or some portion of the text.
- a. *"Genel olarak bu paragrafta İsviçre'nin güzelliğinden bahsetmiş." (This paragraph is generally about the beauties of Switzerland.)*

*Metacognitive Strategies.***16. Comments on the Task Itself: The reader comments on the reading or the task itself.**

- a. *"Bu tip okumaya alışık olmadığım için bir okuyorum bir atlıyorum."* (I am not used to reading this way that's why sometimes I read, sometimes I pass over.)
- b. *"Bu okuma parçası pek hoşuma gitmedi. Bir gazetenin hafta sonu ekinde alınma halinde."* (I didn't like this passage. I think it's been taken from the weekend edition of a newspaper.)

17. Comments on Own Behaviour and Process: The reader expresses awareness of the components of the process, describes strategy use in case of comprehension failure, monitors comprehension, and assesses his/her degree of understanding of the text.

- a. *"Burada bazı bilmediğim kelimeler var ama genelini anladığım için su anda onlara bakmıyorum."* (There are some words I don't know but I got the general idea that's why I'm not looking them up now.)

About the Authors

Reyhan Salataci is a teacher of English at the English Preparatory Programme, Istanbul Technical University. She also works in the test office of the same programme. She holds a B.A and an M.A in English Language Teaching. Dr. Salataci may be contacted via email at salataci@hotmail.com

Ayşe Akyel is a professor of Foreign Language Education at Bogazici University, Faculty of Education. She teaches Methodology, Skills, Teacher Education and Literature in EFL courses at both graduate and undergraduate levels. She has published articles on EFL writing, teacher education, and the use of literature in the EFL context. Dr. Akyel may be contacted via email at akyel@boun.edu.tr