

## Comprehending the Text Through the Use of Metacognitive Strategies



### Linguistics

**Keywords:** strategic approach, metacognitive strategies, textual analysis, metacognitive reading strategies, reading skills, reading comprehension, reading comprehension test, journals.

Marija Mijušković

Teaching Assistant. Department of English Language and Literature. Faculty of Philosophy, Nikšić. University of Montenegro.

### Abstract

Reading comprehension is defined as the level of understanding of a text where the understanding comes from the interaction between the reader and the text. In the foreign language classroom, reading comprehension can be developed in different ways, that is, through many different approaches that the teacher uses in the classroom. One of the most recommended approaches, at the beginning of the 21st century, is the strategic approach. It refers to the use of effective strategies that help readers to think about their own reading process, that is, to be actively involved in it. In this way, readers have a tendency to become proficient readers. In order to help them become proficient readers, teachers should teach their students to use different set of metacognitive strategies that could help them to actively think about what they do during the reading process.

This study aims to investigate the effectiveness of metacognitive strategies being used within textual analysis lessons at the level of university students who study English as a foreign language. Namely, the participants of the study were 65 students of English in their first, second and third years of studies. According to the results of a reading comprehension pre-test carried out at the beginning of the study, they were classified into six groups as the control groups and experimental groups.

Metacognitive strategies were used only in the experimental groups. However, students in both the control and experimental groups wrote journals, in order to check whether the instruction made a difference in the results of the students' journals and also to follow students' progression in reading comprehension. The journals were assessed by scoring rubrics. Two questionnaires, one for teachers of textual analysis and the other for students, were also used as instruments in the study.

The data of the study was quantitatively analysed. Research results revealed that instruction in metacognitive strategies made a significant contribution to the achievement of the students in reading comprehension. Further research can focus on the contribution of metacognitive strategy use to other language skills, such as listening, speaking and writing..

### A Review of Literature

At the beginning of the 21st century, there has been a growing interest in the strategic approach to English language teaching and learning (Vehovec-Kolić, 2004; Cohen, 2005; Mumin, 2007; Mehrpour, 2012; Zang, 2013; Seepho, 2013). This approach, aimed at better teaching and learning of English, primarily as a foreign language, provides a significant set of metacognitive strategies as well as new approaches to assessing students' progression (Jeftić, 2008) in reading skills, for instance, while using metacognitive strategies.

It is said that these strategies are completely applicable to all four language skills, namely listening, speaking, reading and writing, where we put special emphasis on reading. Metacognitive strategies increase readers' meaning construction, monitoring of text and reading comprehension, and their ability to evaluate the text they are reading (Kamijo, 2009). Metacognitive readers are regarded as proficient readers who are able to plan, monitor and evaluate their reading process. In other words, proficient readers are aware of their reading and improve their reading comprehension using metacognitive strategies of planning, monitoring and evaluating. Those strategies actually correspond to different phases of reading, namely the pre-reading phase, the during-reading phase and the post-reading phase, where further subclassification of planning, monitoring and evaluating strategies are used within the above-mentioned phases in reading.

Although a few significant studies worldwide are focusing mainly on metacognitive strategies used within skill development, especially reading (Oxford, 1990; Kolić-Vehovec, 2004; Sadighi and Mehrpour, 2012; Zang, 2013), and produce impressive results, there is no research focusing even on similar aspects in Montenegro's foreign and English language classroom setting. On the other hand, only a few studies have investigated modern strategic approaches to speaking skills (Nikčević and Bogojević, 2008) and textbook evaluation (Brajković, 2011). Metacognitive strategies are recognised as being very important and useful in the educational system of Montenegro (Lalović, 2009; Pešić, 2011). They are recognised and recommended in a wider sense, in order to be applied within

the educational system in general. However, there is no research that has been done in the field, even in a general sense. Since the educational system in Montenegro is aiming for modern approaches to teaching, autonomous learning and autonomous learners (Perić, 2011) where they are taught to learn how to learn (Oxford, 1990), metacognitive strategies in teaching and learning are unavoidable. In order to emphasise and investigate their importance, research results are more than welcome.

In this manner, the purpose of this study is to investigate the effectiveness of metacognitive strategies use for reading comprehension and to raise awareness about importance of their implementation for readers to become proficient.

It is said that metacognitive strategies help learners to learn how to learn (Oxford, 1990) and that those who know how to learn, know enough (Adams in Oxford 1990:135). Metacognitive strategies, belonging to an indirect type of strategy, allow learners to control their own cognition, where they can coordinate the learning process by focusing on learning through centring, arranging, planning and evaluating. In other words, centring, arranging, planning and evaluating refer to the main classification of metacognitive strategies where they are further subclassified. One of the most accepted classifications of metacognitive strategies comes from Rebecca Oxford, a very well-known practitioner who has contributed a lot to the field of language learning strategies.

The main category of classification (centring your learning, arranging your learning and evaluating your learning) refer to active thinking about a task. The *Centring Your Learning* set of metacognitive strategies helps learners to focus their attention on certain language tasks. The *Arranging and Planning Your Learning* metacognitive strategies help learners to organise and plan learning, setting the goals, considering task purposes, etc. And finally, the *Evaluating Your Learning* set of metacognitive strategies involves evaluating overall progress in learning.

Reading is regarded as one of the most significant instruments for learning a foreign language. The use of different strategies helps learners become proficient readers. When learners read in a strategic manner, they are actively involved in the reading process. The ultimate goal of strategic reading is reading comprehension.

Additionally, strategic reading is a feature of proficient readers where the reading process occurs within three phases: pre-reading, during reading and post-reading. When it comes to metacognitive strategies used in the reading process, we use metacognitive strategies of planning within the pre-reading phase, metacognitive strategies of monitoring within the during-reading phase and metacognitive strategies of evaluation within the post-reading phase.

For example, in the pre-reading phase the learner can activate background knowledge and connect it with the new information he/she gets out of reading a text. Furthermore, the reader can predict the content of the text to be read.

Within the during-reading phase, the reader actively constructs the meaning of the text and uses metacognitive strategies of drawing conclusions, directed attention or selective attention.

After reading, the learner can summarise or paraphrase the text and check how much he/she has comprehended the text being read.

The most important component of strategic reading is metacognition. It is regarded as the most important one for effective reading where reading is said to be effective when it results in reading comprehension.

Even though the aim of 21st century teaching methodologies is to put the learner first, where the learner should experience the active context of learning, that is, active involvement in all aspects of learning, the teacher's role is equally important. The teacher is the one who leads the learner towards autonomy, namely active and independent involvement in the learning process.

Teachers should also have the knowledge and skills to lead, facilitate and direct the learner towards autonomous learning. Apart from significant results in the research field of strategic reading, not much has been done in Montenegro, especially when it comes to research on matters at the level of university students.

### Research Questions

Research questions for the study were framed as follows: Do metacognitive strategies for reading have a positive effect on EFL reading learners at the university level of studies? *Do metacognitive strategies for reading have a positive effect on EFL reading learners' journal results at the university level of studies?* It is hypothesised by the researcher that there will be statistically significant positive effects from metacognitive strategies in all groups. It is hypothesised by the researcher that there will be statistically significant positive effects from metacognitive strategies on writing journals, that is, the results of journals, in all groups.

### Methods

The method employed for this research study was first establishing the sample participants from three different levels of language development. The participants were 65 university students with English as their foreign language in their 1st, 2nd and 3rd years of studies. Each group was split into a control and an experimental group. Both groups took a reading comprehension pre-test to evaluate their levels of reading comprehension throughout the study. The pre-test was used in order to homogenise the groups so that they were even in terms of reading comprehension level and before the experimental groups received any input. At that point, there was no instructional input, at the beginning of academic year and it was before giving any instruction in experimental groups. Namely, only experimental groups got input in the form of using metacognitive strategies within textual analysis lessons. The post-testing was done in a quantitative manner in order to investigate progression in reading comprehension between experimental and control groups, to check whether experimental groups were more successful due to the fact that they used additional tools in reading, i.e. metacognitive strategies.

Students' reading comprehension was judged through multiple choice, true-or-false questions as well as through journals that were accessed through scoring rubrics. It is significant to mention that both experimental and control groups wrote journals about their reading comprehension of analysed text throughout one academic year to check whether metacognitive influencers worked better even for writing journals.

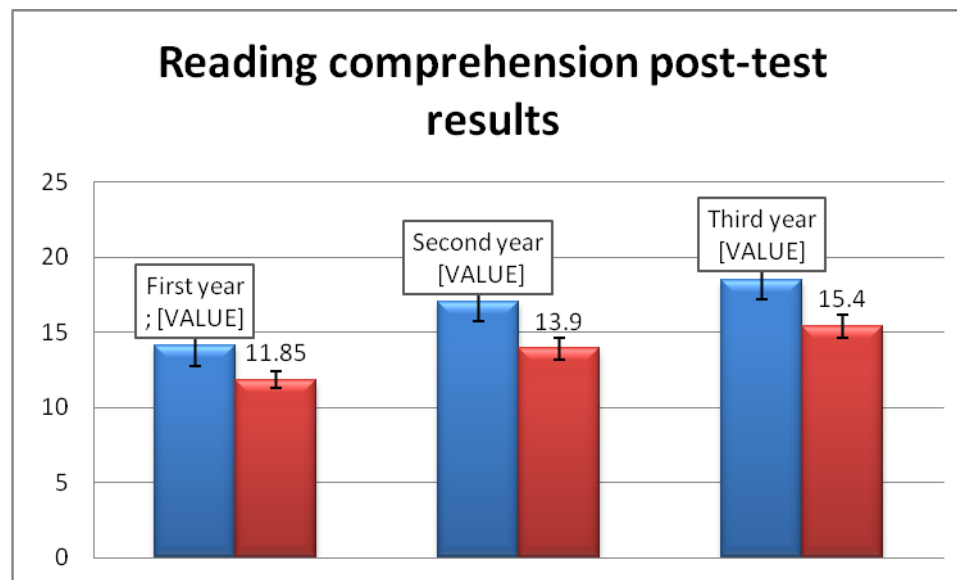
Success was judged according to the difference in average scores between pre- and post-testing and in the average scores between journals of experimental and control groups on a 100-point scale. With the exception of the input used within textual analysis lessons, which was the metacognitive strategy influencer that was given to the experimental group, the instruction for all students was the same, thereby making the metacognitive stimuli the only difference between the group members. In addition, participants in the control and experiment group were selected after the pre-reading comprehension test. Teachers who taught textual analysis had different lengths of teaching experience but it was not considered in this study crucial for the possible success of the experimental groups. Also, elements such as gender, age and type of first language were not considered in this study.

### Results

The results of the study demonstrate that the experimental groups improved in a statistically significant capacity from pre- to post-testing. Also, the experimental groups improved in a statistically significant capacity in writing journals that are assessed by scoring rubrics. This means that level of instruction, in the form of using metacognitive strategies in reading, was effective. Namely, metacognitive input did have an impact on the degree of reading ability, especially 3<sup>rd</sup> year studies.

Figure 1 shows the reading comprehension post-test scoring average for the three respective groups.

Figure 1: Post-Test Score Average



As illustrated in the graph, the average post-test score for first year EFL students in experimental group was 14.08 ( $\bar{X}=14.08$ ) with a standard deviation ( $s=1.50$ ) while the control group had an average post-test score of  $\bar{X}=11.85$  with a standard deviation ( $s=1.72$ ). The  $t$ -test result on the sample of 25 students was 3.443, with a coefficient of statistical significance ( $p=0.002$ ) which means that with 95% we observe a statistically significant difference between the experimental and control groups in favour of the experimental groups. In this case, the researcher's hypothesis that there will be statistically significant positive effects from metacognitive strategy use within the experimental group in the first year of studies is justified.

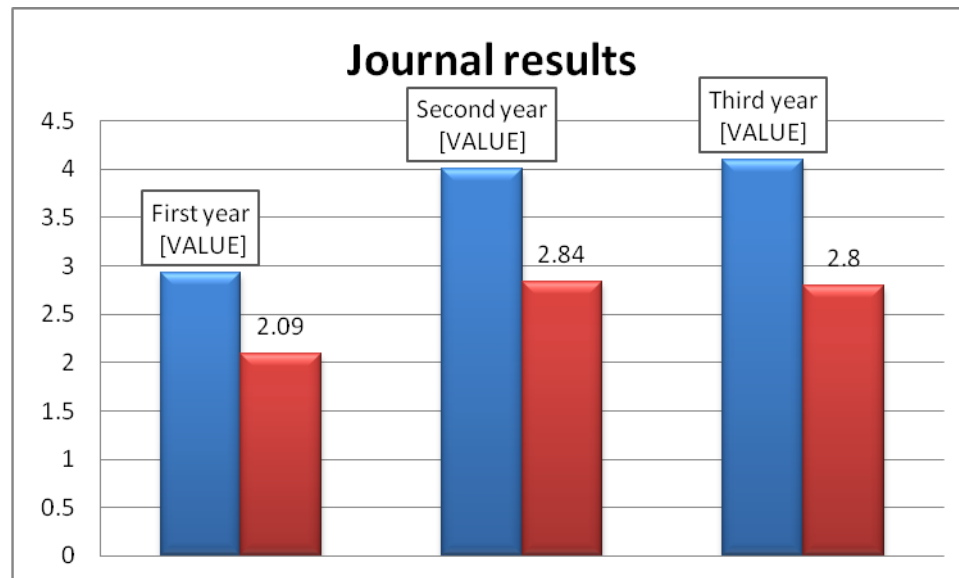
As illustrated in the graph, the average post-test score for second-year EFL students in the experimental group was 17 ( $\bar{X}=17$ ) with standard deviation ( $s=2.05$ ) while the control group had an average post-test score ( $\bar{X}=13.9$ ) with standard deviation ( $s=3.07$ ). The  $t$ -test (23) students was 2.653, with coefficient of statistical significance ( $p=0.016$ ) which means that with 95% we observe a statistically significant difference between the experimental and control groups in favour of the experimental groups. In this case, the researcher's hypothesis that there will be statistically significant positive effects from metacognitive strategy use within the experimental group in the second year of studies is justified.

As illustrated in the graph, the average post-test score for first year EFL students in the experimental group was ( $\bar{X}=18.50$ ) with standard deviation ( $s=1.65$ ) while the control group had an average post-test score ( $\bar{X}=15.40$ ) with standard deviation ( $s=2.76$ ),  $t$ -test (18) scored 3.051 with a coefficient of statistical significance ( $p=0.007$ ) which means that with 95% we observed statistically significant difference between experimental and control groups in favour of experimental groups. In this case, the researcher's hypothesis that there will be statistically significant positive effects from metacognitive strategy use within the experimental group in the third year of studies is justified.

The post-test was the same for all groups and this would explain why third-year individuals scored higher than the previous years, and so forth.

Figure 2 shows the journal scoring average for the three respective groups.

**Figure 2: Journal Scoring Average**



As illustrated in the graph, the average journal score for first year EFL students in experimental group was 2.93 ( $\bar{X}$ =2.93) with standard deviation ( $s$ =0.67) while control group had the average journals score ( $\bar{X}$ =2.09) with standard deviation ( $s$ =0.30).  $T$ -test result,  $t(23)$ =4.0882,  $p$ =0.000 which means that with 99% we observe statistically significant difference between experimental and control groups in favour of experimental groups. In this case, the researcher's hypothesis that there will be statistically significant positive effects of metacognitive strategy use in journals results within experimental group in the first year of studies is justified.

As illustrated in the graph, the average post-test score for second year EFL students in the experimental group was  $\bar{X}$ =4.00 with a standard deviation ( $s$ =0.61) while control group has the average post-test score ( $\bar{X}$ =2.84) with a standard deviation ( $s$ =0,70). The  $t$ -test result,  $t(18)$ =3.934,  $p$ =0.001 which means that with 99% we observe a statistically significant difference between the experimental and control groups in favour of experimental groups. In this case, the researcher's hypothesis that there will be statistically significant positive effects of metacognitive strategy use in journals results within the experimental group in the second year of studies is justified.

As illustrated in the graph, the average post-test score for second year EFL students in the experimental group was  $\bar{X}$ =4.10 with a standard deviation ( $s$ =0.57) while the control group had an average post-test score ( $\bar{X}$ =2.80) with a standard deviation ( $s$ =0.37). The  $t$ -test result,  $t(18)$ =6.091,  $p$ =0.000 which means that with 99% we observe a statistically significant difference between the experimental and control groups in favour of the experimental groups. In this case, the researcher's hypothesis that there will be statistically significant positive effects of metacognitive strategy use in journal results within the experimental group in the third year of studies is justified.

## Discussion

The results of the study demonstrates that the experimental groups which were exposed to metacognitive strategies scored higher on their post-tests and on writing journals than their control-group counterparts. Students' reading skills became higher in test scores with the number of years they had been studying. When combined with the metacognitive strategies, the degree of change in scores became very different according to the input the experimental groups acquired throughout one academic year.

These results give validity to the effectiveness of metacognitive strategies on reading skills. Further studies would have to be conducted to observe the significance of metacognitive strategy use not only within reading skills but also within other language skills such as listening, speaking and writing.

### Conclusions

Based on the findings elaborated above, it was concluded that metacognitive reading strategies do have a positive effect on EFL learners' reading at the university level. In all situations the students of experimental groups which were exposed to metacognitive strategies performed better than their counterparts who were not exposed to such strategies. The reading performance post-test from experimental groups is evident. In addition, this study also found better journal results within the experimental groups. The research implications for EFL reading classrooms suggest that there is no disadvantage to metacognitive strategy interventions and only potential benefits are found. As a result, though, further research is necessary to demonstrate all the ways and reasons how and why this method works where university teachers could benefit from the incorporating metacognitive strategies into their teaching at the university level.

### References

1. Brajković, N. (2011). *Individualizacijai diferencijacija u udžbenicimaruskogjezika za osnovnuškolu (teorijskoprincipiikonstrukcijskarešenja)*. (Individualisation and differentiation in primary school Russian language textbooks) Unpublished PhD dissertation. Beograd.
2. Cohen, A. D. (1994). *Assessing Language Ability in the Classroom*. Boston: Heinle&Heinle Publishers
3. Cohen, A. D. (1998). *Strategies in Learning and Using a Second Language*. London: Longman
4. Jeftić, D. (2008). "Assessment in the EFL/ESL Classroom". *Evaluacija u nastavijezikaiknjiževnosti. Zbornikradova*. (Ed.) Julijana Vučoi Biljana Milatović, Nikšić: FilozofskifakultetNikšić, pp. 23- 39.
5. Kamijo, T. (2009). Metacognitive Reading Strategies in EAP: "A Case Study with Practical Implications for Teaching EAP Reading Comprehension", [http://r-cube.ritsumei.ac.jp/bitstream/10367/4084/1/LCS\\_22\\_4pp217-232Kamijo.pdf](http://r-cube.ritsumei.ac.jp/bitstream/10367/4084/1/LCS_22_4pp217-232Kamijo.pdf), pp. 239-251.
6. Kolić- Vehovec, S., Igor Bajšanski (2006). "Metacognitive strategies and reading comprehension in elementary-school students". *European Journal of Psychology of Education*. VolumeXXI, No. 4, pp. 439-451.
7. Lalović, Z. (2010). "Kognitivneimetakognitivnestrategijevođenjaprosesaučenja".*Našaškola. Komunikacijom do znanja. (Cognitive and metacognitive strategies to guiding the process of learning)* (Ed.) PavleGoranović, Podgorica: Zavod za školstvo, pp. 7-29.
8. Mehrpour, S. et al. (2012). "Teaching Reading Comprehension Strategies to Iranian EFL Pre-University Students". *The Journal of Teaching Language Skills*. 4(1), 66/4, pp. 107-139.
9. Mumin, M. (2007). "How do we develop reading skills in the second language classroom?"*Interkatedarskakonferencijaanglističkihkatedri*. (Ed.) Vladimir Ž. Jovanović, Niš: Filozofskifakultet u Nišu, pp. 291- 297.
10. Nikčević, J. i D. Bogojević. (2008). "Evaluacijausmeneprodukcije u nastavifrancuskogjezika". *Evaluacija u nastavijezikaiknjiževnosti. Zbornikradova. (Assessment of oral production in French language lessons)* (Ed.) Julijana Vučo, Nikšić: Filozofskifakultet, pp. 319-329.
11. Oxford, R.L. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House
12. Perić, N. (2011). "Autonomijaučenika". *Našaškola. Komunikacijom do znanja.(Learner autonomy)* (Ed.) GoranovićPavle, Podgorica: Zavod za školstvo, pp. 39-51.
13. Pešić, J. (1995). *Novi pristupistrukturuiudžbenika. (New approaches to the structure of textbooks)* Beograd: Zavod za Udžbenike
14. Zhang, L. And S. Seepho. (2013). "Metacognitive Strategy Use and Academic Reading Achievement: Insights from a Chinese Context". *Electronic Journal of Foreign Language Teaching*, Volume 10, No.1, pp. 54-64.