

conducted on students' scores of the post-tests. The results showed that there was a significant difference between the students' scores in the experimental and control conditions. ($t(14) = 6.90, p < 0.5$). The test, therefore, showed that the overall mean scores of experimental condition were significantly higher than those of the control condition.

In sum, the results of the study and the examination of three sources of data revealed that the students who were taught through mind mapping technique could improve their writing skill more effectively.

Reflection

In this action research, I carefully examined the effects of mind mapping on the development of the students' writing skill. The results of the investigation based on three sources of my own observation, regular quizzes, and final exam showed that the use of mind mapping techniques enhanced the writing abilities of the learners of the experimental group more than the learners who were taught through the conventional teaching techniques in the control group. This study, thus

suggests that teachers can effectively employ this technique to enhance their students' productive skills. However, since the scope of this study was limited to writing skill, future studies can be conducted on other areas such as note taking, preparation for conferences, giving presentation, as other preparatory techniques for the development of different language skills.

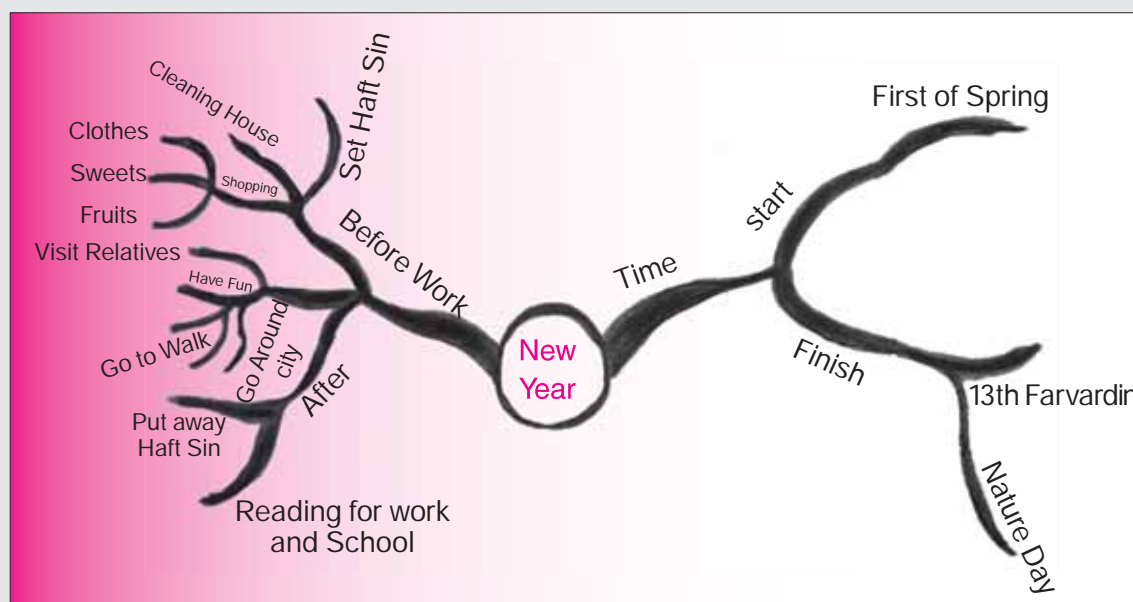
Acknowledgements: The author would like to thank all participants of the study who patiently attended the classes and cooperated sincerely during the study period. The author would especially thank Ms. Zinat Mortazavi Yek, who collaborated in students' scoring.

References

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Appendix

Examples of mind maps drawn by students:





by asking them to sit for a writing test. The students in both classes were supposed to write about the following topic: "Write about Yalda Night. What do people usually do in your country on this occasion?" Their writing samples were scored and recorded for future comparisons.

After teaching the students for 20 sessions (in 10 weeks), they were tested at the end of the summer course. More specifically, they were asked to write a 100 word essay about the following topic: "Write about the first day of your elementary school. How did you feel?" All writings were reviewed and graded and the performances of the two groups were then compared.

As I mentioned, the goal of this study was to improve the writing skills of my intermediate learners in conducting the research. I monitored the students' progress based on ongoing assessments. However, in order to ensure the consistency of my ongoing assessments, I took a final test at the end of the semester. Therefore, I had the students sit for a writing test about their first day of elementary school and how they felt. I scored and compared the students' writing performance to examine the effects of mind mapping on their writing skill.

three main sources. First my observation throughout the course, helped me develop a judgment about the effectiveness of mind mapping technique. In particular I observed that the use of this technique increased students' motivation for writing and at the same time engaged them in the process of education. In addition, the daily quizzes provided a benchmark for comparing the students' performance in the two classes of control and experimental groups. Although providing a systematic account of the students' gradual progress went beyond the purpose of the research study, the overall comparison of the average scores of the students showed the positive impact of mind mapping technique. The last source that I relied on to examine the effectiveness of mind mapping technique was the final exam of the students. That is, in order to see the treatment effects on students' scores in the final exam their scores were calculated. As the following table shows, the experimental group achieved higher scores.

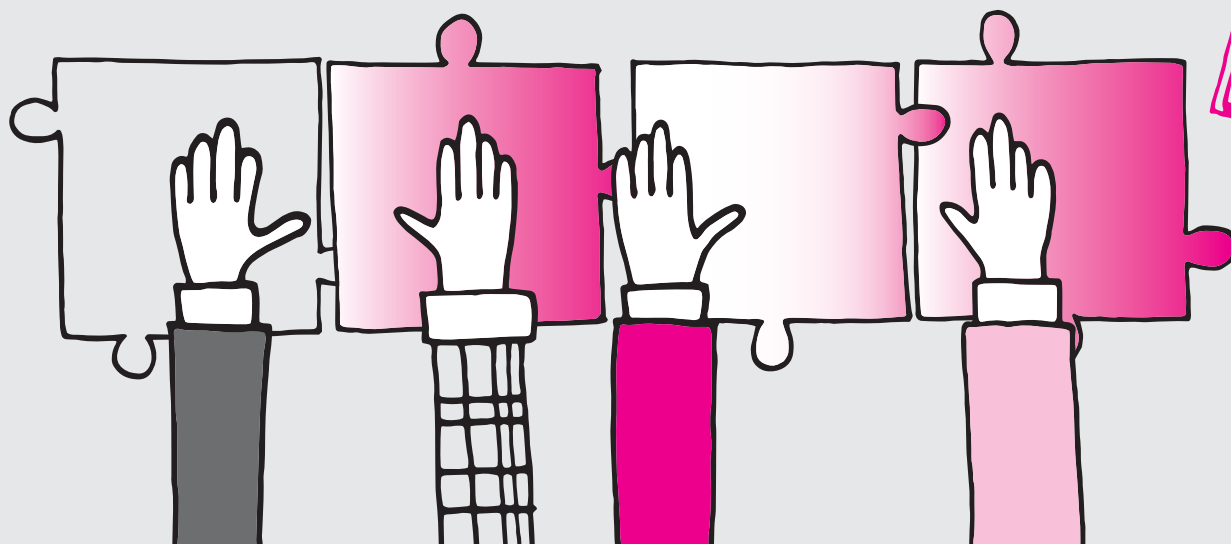
Descriptive statistics of final exam

Groups of students	Number	Mean scores	SD
Experimental	15	14.54	3.22
Control	15	13.97	3.14

Evaluation

The progress of the students in terms of writing skill was investigated through

In order to examine the potential effect of mind mapping on students' scores, independent samples T-test was



Planning

Scholars have considered mind mapping a very effective method of optimizing learning capacity and understanding of how the elements of complex structures are connected together. By definition, a mind map is a powerful graphic technique which provides a full range of cortical skills in a single, strong manner. Mind mapping has been defined as 'visual, non-linear representations of ideas and their relationships' (Biktimirov & Nilson, 2006). In other words, mind maps support cognitive depth as one of the main learning strategies recommended by educationalists (Borovková, 2014).

Mind maps give space for making our notes and learning more personal. Connecting known and unknown, old and new, personal and general information is possible through mind mapping. In addition, mind maps which are created by the students themselves are unique products of theirs and therefore much more valuable for them (Borovková, 2014).

In the present action research I intended to examine whether mind mapping can help my students improve their writing skill. I began this study by considering a key question of whether the use of mind mapping technique can have any effects on my students' writing achievement. Since I had already studied about the effect of this technique on speaking skill, I predicted that such an effect can also be applicable to writing skill, if used properly.

Action

The context of this study was a language institute in Tabas, where I have been teaching English during the last few years. I conducted this study in two intermediate classes. In each of my classes there were 15 students; thus a

total of 30 students comprised the subjects for this study. My students were all female and their ages ranged from 15 to 20 years old. Since I intended to examine the effects of mind mapping in a rather controlled manner, I decided to use this technique only in one of the classes and consider the other class as a control group. I began the study during the summer semester because the students had more free time and could participate in the classes more conveniently. The classes were held twice a week, each for 90 minutes.

During the main phase of the study, I provided the students in the experimental class with some mind mapping techniques and taught the control group in a traditional way. A sample of the mind mapping techniques is provided in the appendix. To minimize the varieties of instruction in both classes, I managed to monitor students' activities very closely and provided similar instruction in both classes. While doing the exercises and working on their writing activities, I provided individual help, where required. Every session, the students were given a short quiz and their quizzes were always graded, returned to them with comments on strengths and weaknesses. Similarly, words of encouragement were always given to students in both classes. The slightest improvement were noted and commended. Answers were also discussed in both classes.

A mind map is a powerful graphic technique which provides a full range of cortical skills in a single and strong manner

Observation

Prior to the beginning of the study I tested my students' writing performance





I Used Mind Mapping to Develop My Students' Writing Skill

Vahideh Rastgoo
Freelance English Instructor

چکیده

معلمان همواره در پی ایجاد محیط‌هایی برای تشویق مشارکت فعال دانش‌آموزان در روند یادگیری بوده‌اند. نقشه ذهنی یکی از روش‌های تدریس و یادگیری است که در این راستا مورد استفاده قرار می‌گیرد. در مقاله اقدام‌پژوهشی در پی آن هستیم تا تأثیر تکنیک نقشه ذهنی را بر رشد مهارت‌های نوشتاری زبان‌آموزان ایرانی، در سطح متوسط زبان انگلیسی، بررسی کنیم. برای این منظور، دو کلاس آموزشی شامل سی دانش‌آموز دختر از مؤسسه شکوه طبس در استان خراسان مورد مطالعه قرار گرفتند. در یک کلاس آموزش‌های مرسوم و در کلاس دیگر تدریس مهارت نوشتن اجرا شد. نتایج تحقیق نشان داد که استفاده از نقشه ذهنی در تدریس نوشتن می‌تواند مهارت‌های نوشتاری را بهبود بخشد. این مهارت‌ها شامل توانایی دانش‌آموزان در سازمان‌دهی متن، استفاده از گرامر، توسعه منطقی متن، نقطه‌گذاری و سبک است. علاوه بر این، نویسندگان در این مقاله بحث می‌کنند که استفاده از تکنیک نقشه ذهنی در کلاس‌های نوشتاری می‌تواند در نوشتن مؤثرتر متن کمک کند و انگیزه و علاقه دانش‌آموزان را نیز افزایش دهد.

کلیدواژه‌ها: نوشتن، مهارت‌های نوشتاری، نقشه ذهنی

Abstract

Educators have always sought to create environments that actively engage students in their learning process. Mind mapping is one of the teaching and learning strategies emerged in this regard. The present paper used mind mapping technique for the development of intermediate Iranian EFL learners' writing skills. Two classes consisting of 30 students were studied. While in the first class conventional techniques of language teaching were used, in the second class the instructor taught the students through mind mapping technique. The research findings indicated that the use of mind mapping in teaching writing could improve the learners' writing skills. This includes their abilities in organizing the text, grammar use, logical development of the text, punctuation, and style. Moreover, the paper argues that applying mind mapping technique in writing classes helps the learners in writing more effectively and increases their motivation and interest in the task as well.

Key Words: writing, writing skills, mind mapping



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Guidelines for Publishing in Action Research

We have recently specified a special column in *Roshd FLT Journal* for publishing small-scale research studies that teachers conduct in their own classes. We intend to publish at least one action research report in each issue of *Roshd FLT Journal*. Thus, we encourage you to submit the reports of your classroom research to be published in our "Action Research Column".

We accept papers on the basis of their relevancy to our readers, simplicity, readability, and freshness of viewpoint. Your papers do not have to follow the standards of scholarly, academic research papers. We do not use complicated statistical analyses, technical terms or footnotes. Thus, write in a simple, plain and easy to understand manner. Please cite all of your sources within the text, and provide a list of references at the end of your article. When writing your paper, please include the following information in your report:

- Your research questions and your plan for answering the research questions
- The actions that you did over a period of time in order to answer the questions
- Your evaluation of the effects of the actions and any evidence that support your evaluation
- Your conclusion and suggestions for other teachers

To be accepted for publication, your articles need to:

- Be maximum 2500 words, including references
- Be on a topic of relevance or interest to Iranian language teachers
- Include an abstract of no more than 200 words, and a list of references

We are looking forward to your action research reports. Should you have any inquiries about how to prepare a report of your action research, you can send an email to Dr. Mehrani at the following address: meh.mehrani@gmail.com