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Учащ. Д. Г. Воронова

Науч. рук. О. В. Сапунова, учитель английского языка;  
О. В. Великанова, учитель английского языка  
(ГУО «Средняя школа № 23 г. Могилева»)

### **THE ROLE OF MATHEMATICAL THINKING IN MASTERING THE ENGLISH LANGUAGE**

I am a student of Form 9 and soon I will have to make a decision where to go to study and what subjects I should pay more attention to. That's why I've got questioned what subjects I could study so that they could help a better mastering of one another. Since I like Math, exact sciences and English, I wonder if mathematical thinking helps to master the English language better.

The hypothesis of my research is that mathematical thinking helps to master the English language more successfully

The aim is to study the interconnection between the level of development of mathematical thinking and the level of mastering of English.

To carry out the research I set the following tasks:

- to identify the term “mathematical thinking”;
- to study the particular features of English grammatical structure formation;
- to compare pupils’ marks in English and Maths;
- to conduct physiological tests.

I set these tasks to realize what mathematical thinking is in general. I also need to study the particular features of English grammatical structure formation to see the way of building sentences in English. Then I need to compare the marks in Maths and English to find out the interconnection between them. We will need to conduct psychological tests to see the real information about pupils’ interests and abilities.

To conduct this research work I will use the methods of comparison and exploration.

I think this theme is very actual as choosing the right subjects which you need to enter a university and make a good career is very important.

The main difference of mathematical thinking from the ordinary thinking is that the first one develops the skill of critical perception and helps to understand the causes of different phenomena.

The main particular feature of English grammatical structure formation is it nearly lost all its grammatical endings for the adjectives and the nouns and just the verb has retained a small number of endings.

So, for example, the tenses of the English verb forms (“is going”, “has been writing”) are formed analytically, because they consist of an auxiliary part, which doesn’t have its lexical meaning and the significant part which shows the main meaning of the tense form.

The poverty of the form-changing system in modern English leads to the fact that the position of members of a sentence in relation towards each other have a particular importance. For example, compare:

- The hunter killed the bear.
- The bear killed the hunter.

The examples above express a different meaning, although the lexical composition is the same, only the order of the components is changed.

Thus, the types of the tense forms of the English verb can be equated to a formula, where we need certain components taken together. And the

English sentence also has its own structure, resembling the mathematical formula Subject - Predicate - Object.

In our practical part, we compared the students' marks in English and Mathematics. For a more objective result, we took all the students from Forms 9 and compared their average scores in Maths and English.

Based on these results, we can see that 60% of students have a small difference in average scores which is no more than 1-point.

Two psychological tests were conducted with these students as well. Conducting the "Method "Type of thinking" we were interested in *abstract-symbolic thinking and verbal and logical thinking* which are responsible for the exact sciences and for foreign languages accordingly. Summing up the data, we got 70% of students who have little differences in thinking types.

The technique the "Map of Interests" showed that 70% of students have little or no difference in interests in these subjects. So the conclusions are:

1. Mathematical thinking is an abstract theoretical thinking;
2. The English language is referred to analytical languages;
3. Almost 60% of students have similar marks in English and Maths;
4. 70% of students have a little difference in the types of thinking;
5. 68% of students have a difference in interests in points no more than 2 points.

Thus we can say that there is a positive interaction between mathematical thinking and the study of the English language. The results of this work can be valuable for the formation of specialized economic classes in school.

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Учащ. Д. Е. Гайдучик

Науч. рук. Т. В. Шикеля, учитель английского языка  
(ГУО «Средняя школа д. Вистычи»)

## **THE ORIGIN OF FLOWERS IN THE EMBLEMS OF THE ENGLISH-SPEAKING COUNTRIES AND BELARUS**

The work is devoted to the studying of the origin of flower-symbols of the UK, the USA, Canada, Australia and New Zealand in comparison with Belarus.

In a number of countries, plants have been chosen as symbols to represent specific geographic areas. The term «floral emblem», which refers to flowers, primarily used in the UK, Australia and Canada. In the United States, the term «state flower» is more often used.