

MicroWorlds for education

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Abstract

This paper is dedicated to the application of the program MicroWorlds for education of young students (from 7 to 16 years old) in the Moscow Center of Development of Creativity of Children and Youth "PLANET" by Tatiana GERASIMOVA. The results of the teacher's work are presented here in some students' projects:

"The Album of the 8-th March Greeting Cards "

"The Album of the Easter Greeting Cards"

Illustrations to the tale of Boris Zhitkov "The Brave Duckling"

Illustrations to the tale of Sergey Mihalkov "The badly eating Girl"

As well as the presentation of the Center "PLANET" itself, named "Meet our Center".

Keywords

MicroWorlds, LOGO-projects.

1. Introduction

The home of the successful application of MicroWorlds to the education of the young students is Moscow Children's Creativity Development Center "PLANET".



Figure 1. Moscow Children's Creativity Development Center "PLANET"

We should like to present here some creative projects of the most brilliant students of the Center "PLANET".



Figure 2. The best representatives of the Center “PLANET”

2. Greeting Cards

The greeting cards to the holidays of the 8-th March and Easter, made / prepared by the children for their dearly-beloved relatives, for their teachers and friends, are real works of art / masterpieces.



Figure 3. The greeting card “from Sonia”

The children used for their work the ready forms of the program MicroWorlds, the pictures from the other sources (programs and computer games) and their own drawing and painting, done by the means of the graphic MicroWorlds’ redactor. Some pictures are made with the help of the plane-table.

In addition to graphics, young students compose small texts and rhymes and type them using the text-box or write by hand. It makes their works even more fascinating. So the children learn to type and to paint and, at the same time, choose their style and develop their taste.



Figure 4. The greeting card for Easter

After the personal cards are ready, we collect them into the album and make the united presentation in MicroWorlds with the musical accompaniment. We show it further to the parents during the parties at our Center. The children do all their best to be the first among the authors of the album.

In order to facilitate the recognition of the authors, we take their numeric photos. The children take photos of each other with pleasure. It is one of the tasks for the pupils during their collective work. This collaboration is useful in the education plan.

3. The students' projects



Figure 5. The “open lesson” in the Center “PLANET”

In this photo you can see the children with the pictures of the instruments of the MicroWorlds' interface. Everyone is explaining at the “open lesson” how the instrument works and how it is used in his project.

During the first school year, we study the work with the texts, graphics, music and sound. Step by step, pupils approach their goal : to make their own projects. Finally, they prepare a whole album of projects. The themes of the projects are chosen by the children themselves.



Figure 6. Example of the illustration and the photo of its author.

While creating a musical project with the help of the MicroWorld's musical editor, the pupil chooses his (or her) beloved song for illustration, type the notes of its melody (most of the

pupils learn musical grammar for the first time). Then he (or she) draws a personage of the song and makes the proper animation, using LOGO commands .



Figure 7. Sergey Mihalkov "The badly eating Girl"

Using the methodical materials of Moscow Institute of the New Technologies in Education and our own methodical works, we created a Program of two-year teaching to school children with the help of MicroWorlds. This Program received / was granted Moscow educational certificate.

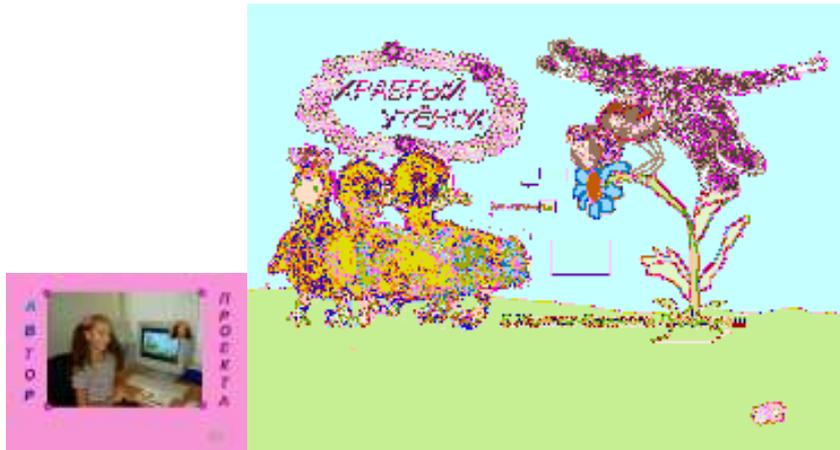


Figure 8. Boris Zhitkov "The Brave Duckling"

During the second year of study, the children who liked programming have a possibility to get to know the programming language LOGO better. The students create original programs for their projects. They discuss the texts and the pictures in classes.



Figure 9. The students of the Center discuss their projects

The main event in the life of the Center, which takes place at the end of the school year, is the competition of the students' projects.

The members of the teachers' jury state the value of the pupils' projects. The young authors tell / talk about their interests and their plans for the future.

The remarkable and wonderful children's works make other children come to our Center.

We hope to develop many more projects together with our permanent students and with the new enthusiasts taken by this exciting and useful creative process.



Figure 10. The teachers' jury.

All the best projects compose the content of CD, which becomes a real presentation of our Center of the Children's Creativity Development "PLANET" for the whole year.



Figure 11. CD with the students' projects



Figure 12. The sign of CD-2005 of the Children's Creativity Development Center "PLANET"

4. Conclusion

The work in the group develops communicative qualities of the students. It makes them more attentive to themselves and to other people. The young persons successfully solve the problems of communication by working together. **Learning by doing – it is a good formula of Logo-philosophy, proposed by Seimour Papert** . The children learn to live in society.

The work with individual projects develops certain individual qualities of the pupils' characters, such as seriousness, persistence, self-dependence/ self-reliance. It can play a significant role in their further education.

Besides , the students get used to a computer and to the program MicroWorlds. With the help of the rich graphics, programming and animation possibilities, the children compose their own projects and their own interface. They become intelligent and experienced ones, better than by playing simple computer games. creative work of children provokes their interest to numerous useful themes, makes them learn profoundly serious and useful subjects, such as design, literature, history, foreign languages and so on.

An interesting creative work, which gives the expected (or unexpected) result, makes the students respect themselves. It is very important for a student to obtain results of his independent research. Satisfaction, reached by successful creative work, is the best medicine for the children's personal problems, as psychologists say.

Every teacher knows very well how difficult sometimes it is to establish contacts with a teenager with problems, but with the help of creative projects, executed by the means of the MW, we can achieve good pedagogical results.

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