















### **MODERN TEACHER**

THE LOCAL ACTIVITIES IN ROMANIA AND CHILDREN PROGRES DURING THE IMPLEMENTATION OF THE ERASMUS+ PROJECT

GRĂDINIȚA CU PROGRAM PRELUNGIT
"DUMBRAVA MINUNATĂ" FIENI

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### 1. The Thematic Projects

Are naturally ensuring the training of all the skills that the child must acquire, according to the curriculum.

The role of the teacher is to organize learning around topics that children choose and find stimulating.

The child's role is to experiment and make choices in relation to their own learning.

The role of parents is to be involved, facilitating the learning process and the communication between kindergarten and family.

# THEMATIC PROJECT THE SOLAR SISTEM

SOLAR SISTEM POWER POINT PRESENTATION PROJECTION





COMPLETING PICTURES - SOLAR SISTEM



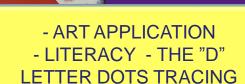
LINE TRACING DESIGN



# THEMATIC PROJECT DINOSAURS



360 VIDEOS PROJECTION





-FAVOURITE DINOSAUR MASKS
MANUFACTURING
-DINOSAUR ROLE PLAYING GAME

# THEMATIC PROJECT POLAR ANIMALS



-MOVIE PRESENTATION





- ART APPLICATION "THE IGLU"

> - "THE MATHEMATIC PENGUIN"

# THEMATIC PROJECT SPRING



-OUTDOOR AND INDOOR PAINTINGS





### **SCREENLESS CODING ACTIVITIES**





-- FIND THE DIRRECTIONS



### **Augmented Reality**

Augmented Reality allows three-dimensional visualization of objects, plants, animals, beings and phenomena studied, combining reality with virtual space, greatly increasing the degree of interaction of the child with them. This technology offers the opportunity to see a moving animal, planets, dinosaurs, the stages of a plant's development, etc.

The information that the child perceives about the world around him is strongly enriched through this technique, it becomes interactive and can be manipulated (objects can be touched, rotated through the device used for augmentation.

### Virtual Reality

Virtual Reality is a technology that simulates a real world or, conversely, an imaginary world. At present, it is used in the educational, military, medical, astronomical, etc. fields.

Compared to Augmented Reality, Virtual Reality simulates the child's presence in the virtual environment, offering the possibility to turn 360 degrees and offers the experience of situations that would have been impossible or difficult and expensive to achieve without this technology (visiting museums, cities, outer space, the underwater world, etc.).

The use of Virtual Reality content is usually very closely monitored and short-lived, with cognitive and behavioral effects on children being very different from those produced in adults.

## **AUGMENTED REALITY**







WOW 4D+
SPACE 4D+
DINOSAURS 4D+
SOLAR SYSTEM 4D+
ANIMALS 4D
ROLF AR



## VIRTUAL REALITY



ANIMAL ZOO VR

-VR "WITHIN" AND "VIRTUAL ABYSS" SOFTWARE





# MUSICAL ACTIVITIES AND INSTRUMENTD



fppt.com



### What is STEAM Education?

"STEAM is an educational approach to learning that uses Science, Technology, Engineering, Arts and Mathematics as access points to guide the survey, dialogue and critical thinking of students.

The end results are students who take risks, engage in experiential learning, persist in problem solving, embrace collaboration, and work through the creative process."

- Susan Riley, Arts Integration Specialist

#### S.T.E.A.M.

It combines four sciences and the art whose initials make up its name.

- S Science
- T Technology
- E Engineering
- A Arts
- M Mathematics (Mathematics)
- The result of this mix of science and art proposes an attractive learning environment for the children in this type of education, where the emphasis is on the application of the methods learned in everyday life.

## STEAM ACTIVITIES



KINETIC SAND
LIGHT TABLE
EXPERIMENTS
MAZE
GEOMETRIC SHAPES
TABLE GAMES (Find the shadow, memory, sort by different concepts)









-SENSORIAL BOTTLES "THE SEASONS"





-GEOMETRIC SHAPES AND NUMBERS



-MAGNETS





-THE WALKING WATER

### SCREEN-LESS CODING AND EDUCATIONAL ROBOTS

# What to look for when it comes to children's programming education?

Basic concepts need to be introduced during practice and knowledge needs to be deepened with playful tasks so that it is almost imperceptible.

Without a well-structured and well-thought-out independent system, learning programming cannot be very successful, since it must incorporate the necessary logic, knowledge and mathematical skills. Continuous feedback and a sense of success in solving a task in a creative way can be a much better guarantee of progress than constant learning.

Projects where learning takes place by creating games or programming robots can be even more interesting and can build a community because children can play with the things they created at the end of the project. The feeling of "we created this" is a great motivational force.

Children's programming logic can be very easy developed through screen-less coding games and with the help of STEAM educational robots like: Bee Bot, Matatalab, mTiny, Qobo, Dash & Dot, Sphero Bolt, Bootley, so on.

# EDUCATIONAL ROBOTS SPHERO BOLT SPRK







## BEE BOT









## QOBO



# DASH ROBOT



# THE MOUSE ROBOT



### CODING WITH BEE BOT, SPHERO BOLT AND QOBO









## INTERACTIVE BOOKS







### THE LIGHT TABLES









# COUNTING, SUBSTRACTING AND ADDING ACTIVITIES















# COUNTING, SUBSTRACTING AND ADDING ACTIVITIES







# **MODERN METHODS VENN DIAGRAM** THE PYRAMID THE STAR BURST



# GAMES AND EXPERIMENTS The walking water Fishing with magnets









### CONCLUSIONS

Creative learning based on modern technology, through the richness of its contents, helps the child to perceive, to discover, to create, to assimilate knowledge, to develop skills and abilities, to activate his memory, integrating new knowledge in the volume of already existing knowledge, being able to subsequently access these skills, information and competencies to translate them into similar or different situations and contexts.

Every person accumulates and possesses a certain volume of knowledge, a certain life experience that contributes to the formation of his intellect and personality.

During the implementation of the project, children have made a great progress in the development of scientific knowledge and critical thinking, they have more confidence in their own strengths and ideas, have a clearer expression, show originality, desire for knowledge and progress, have a tone mentally better, they have acquired skills to use modern devices, they are much more motivated to actively participate in instructive-educational activities.

The main advantage of using new educational technologies, software and modern interactive methods was the involvement of children in the educational activity and the development of their capacity to issue their own, original opinions on the studied phenomena. In this way, children raised the creative thinking, focused on finding multiple solutions to a problem and choosing the best one. In order for learning through cooperation to be a real success, we have ensured a positive climate during the activities, making the children feel appreciated, valuable, important.

Through the new technologies and modern methods, children have embarked on an adventure of discovering new knowledge, skills and abilities, as active participants. They were happy, they participated with pleasure in activities, in a childhood universe where there was communication, play, joy, friendship and cooperation, acquiring a beneficial emotional charge.

# THANK YOU!