Collodi Primary School – Florence

December 2024

Identification of students' digital skills

Erasmus+

TECHNOLOGY UNDERSTANDING AND SUSTAINABILITY IN PRACTICE

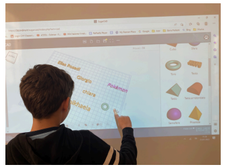
Young students's DIGITAL SKILLS

ScottieGo!
BASICS OF CODING FOR CHILDREN

SCRATCH

Canva

BBC micro:bit



March 2022

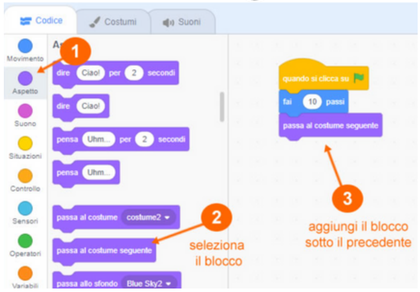
Scottie GO

Scottie Go! Edu is an innovative educational game that teaches kids aged6-15years. programming It can help to develop algorithmic intuition and competencies of pupils, according to the latest developments in methodology.

BACK

April 2022

Scratch Junior



ScratchJr is an introductory programming language that allows toddlers (ages 5 to 7) to create interactive stories and games. By joining programmable blocks together, children can make characters move, jump, dance and sing; they can edit characters using the image editor; They can add voices, sounds, or even images of themselves -- then using programmable blocks they can bring their characters to life.

ScratchJr is inspired by the popular programming language Scratch (scratch.mit.edu) used worldwide by millions of young people (aged 8 and over). To create ScratchJr, we redesigned the interface and programming language to make them suitable for children's development, carefully redesigning all its features to adapt to the level of cognitive, personal, social and emotional development of the little ones.

BACK

December 2022

Logo Competition with Canva

Students deepened their knowledge and use of Canva for the creation of a logo

BACK

January 2023

3D printing and drawing

We are so

proud of

our

final

products...

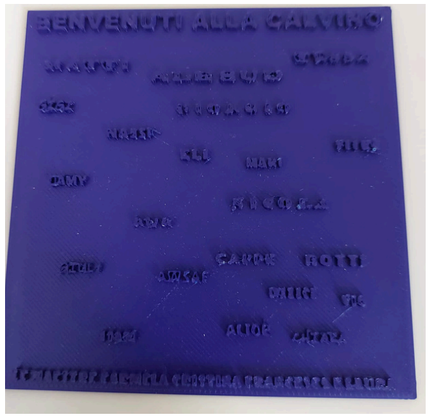
an amazing plate for

our classroom's door

and a stamp

with

all our names



BACK

February 2023

Safer internet Day

Surfing the internet is useful and fun
but can be very dangerous for everyone!

The information you find may be false or wrong.
You can find images that embarrass and offend you
You can meet evil people who can harm you

January 2024

Working with and trying to understanding AI

Explaining AI to little kiddos is not rocket science! It's a fun and exciting way to get their t eeny-tiny brains buzzing! We kicked off the chat by asking them if they had a brain? Nodding heads all around! So, we told them that AI is like a brain for computers. Just like they learn and grow, AI helps computers do the same! It's like a secret buddy that helps computers do awesomely smart things!
To start off, we got the fun flowing by introducing interactive educational games, like " Word Wall," and showed them that learning can be a total blast!

BACK

February 2024

Programming with Micro:Bits

The BBC Micro:Bit is a pocket-size computer with a 5x5 display of 25 LEDs, Bluetooth and sensors that can be programmed by anyone. The BBC Micro:Bit was made possible by many partners. The micro:bit provides an easy and fun introduction to programming and making – switch on, program it to do something fun – wear it, customize it. Just like Arduino, the micro:bit can be connected to and interact with sensors, displays, and other devices.

BACK

April 2024

Robot programming

MTiny

- Talking about Waste sorting in Florence (brainstorming)

During International Earth Day (on April 22) through a brainstorming the teachers spoke with the students about the importance of correct waste disposal in order to protect our planet.
In Florence, domestic waste is collected and separated in bins of different colors based on their composition (yellow for paper, green for glass, blue for plastic, brown for organic waste, etc.)After this lesson, the teachers introduced the mTiny robot to the children.
MTiny is a minirobot suitable for children and able to follow the commands they give it through a remote control that recognizes and sends the commands to the robot.

BACK

Students' Achievements and Comparison with European Digital Skills Recommendations

Project Outcomes

At the end of the Erasmus+ project Technology Understanding and Sustainability. the students of Collodi Primary School developed essential digital skills in line with the set objectives:

Computational Thinking and Coding

Ability to break down complex problems into logical sequences of instructions.

Development of problem_solving strategies through unplugged and digital coding.

Creation of basic programs with Scratch and Micro:Bits.

Digital Creativity and 3D Design

Use of 3D modeling software (SugarCAD. Tinkercad) to design eco_sustainable objects.

Understanding of 3D printing processes and their environmental impact.

Critical and Responsible Use of Technology

Exploration of artificial intelligence and machine learning applied to education.

Virtual reality experiences to expand world knowledge.

Use of digital tools to support inclusion and personalized learning.

Robotics and Automation

Programming and interaction with educational robots (Mytiny Robot).

Application of robotics to solve real_world problems.

Digital Citizenship and Online Safety

Understanding of fundamental online safety rules.

Awareness of the ethical and social implications of technology use.

Comparison with European Recommendations

The skills acquired by students align with the European Digital Competence Framework (DigComp), which identifies five key areas:

1. Information and Data Literacy → Students learned how to search, understand, and evaluate digital information, particularly through virtual exploration and machine learning activities.
2. Communication and Collaboration → The use of digital tools fostered teamwork, critical thinking, and peer collaboration.
3. Digital Content Creation → Students developed skills in creating games, animations, and 3D objects, contributing to original content production.
4. Digital Safety → Activities promoted awareness of online risks and responsible technology use.
5. Problem-Solving → Through coding, robotics, and data monitoring, students improved their analytical and problem-solving abilities.

The project experience demonstrated how an active approach to digital learning not only enhances technological skills but also promotes critical thinking, creativity, and inclusion, fully aligning with European recommendations for primary education.