

ITIS "C. Facchinetti"  
High School (technical school)  
Castellanza (VA)

Bruno PICASSO and Elena SALA  
(Mathematics)

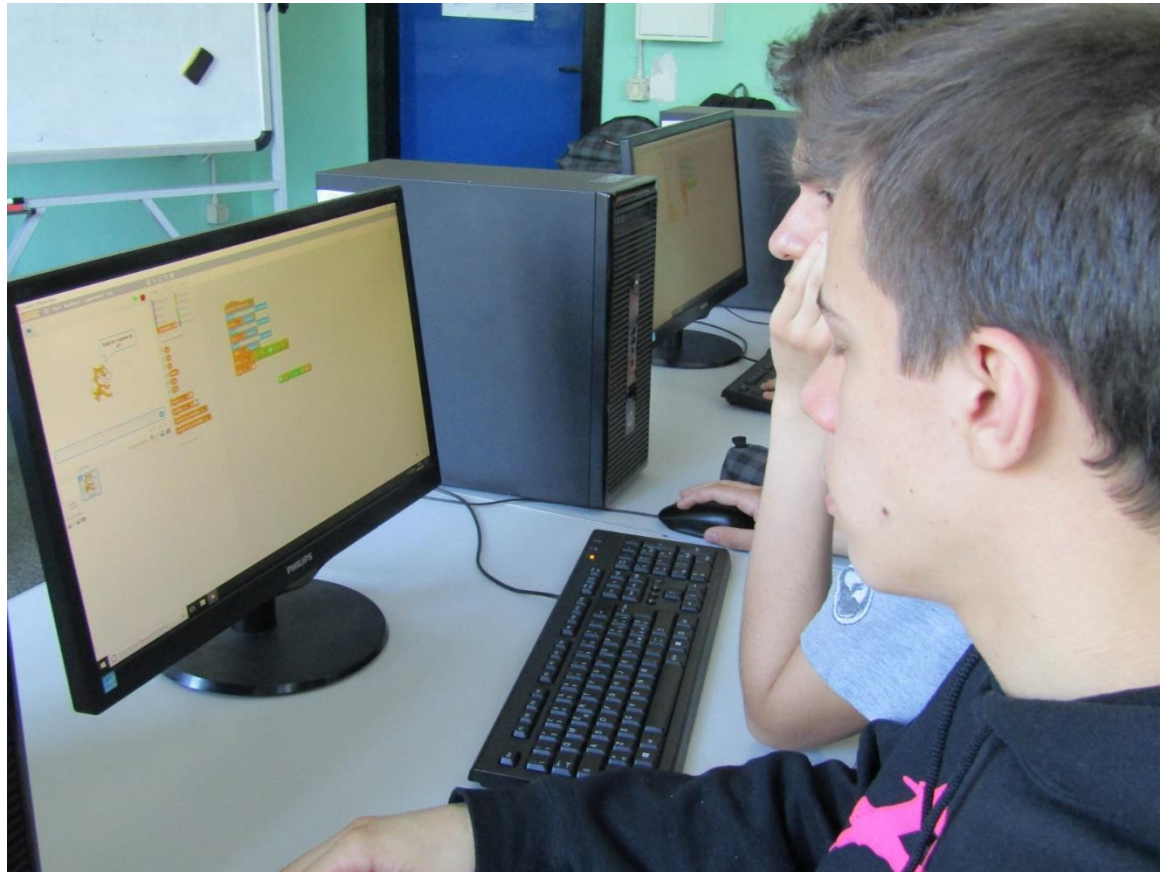
Supported by Giovanna BUSA' and  
Francesca MANDIROLA  
(Computer Science)

</DIS-  
C<3DE}

*Disconnected, discouraged,  
disenabled? Let's code!*

We want your feedback!

# </ What did you (or your students) like the most?



## 1. The use of Scratch:

- The possibility of solving maths problems in an easy way
- The first experience with coding
- A coding approach is helpful to learn a methodological way to solve problems (rather than “trial and error”) and this approach turned out to increase their success with maths

## 2. Being involved in an international project as well as being under the scrutiny of Politecnico di Milano” (which they recognize as a renowned institution)



# What did not go so well?

- 1. Students' viewpoint:** some students felt swamped with extra activities with respect to the ordinary commitments (some of them are not used to homeworks and assignments!)
- 2. Teachers' viewpoint:** the huge amount of time needed to plan the activities and the significant time required by activities not strictly related with our own subject (i.e., the digital skills module)

## **Solution:**

- Cooperation with another maths teacher involved in the project (say, Prof. Elena Sala!) so as to share: ideas, time to plan the activities, ...
- Cooperation with the Computer Science teacher that took in charge both the digital skills module (“Cloud and collaborative learning”) and the theoretical introduction to Scratch



# What did you learn from your experience?

Increase our awareness of the fact that the adoption of diversified teaching strategies (such as the **flipped classroom** approach, **coding**, **group works** and **competitions**, **practical activities**, ...) is helpful to meet the different needs of the poor at maths students and, indeed, resulted in better outcomes.