

## SUBJECT AREAS:

Technology

## ACTIVITY DESCRIPTION:

Students will learn about environmental sustainability and use of digital tools.

## OBJECTIVES:

- To learn that use of digital tools and technology has positive but also negative effect on our environment.

## MATERIALS:

Computers for the research

## GRADE/LEVEL:

Secondary school (15-18)

## DURATION:

Preparation time: 30 min.

Activity time: 45 min.

## PLACE:

Classroom

## AUTOR:

*Centro per lo Sviluppo Creativo  
"Danilo Dolci" - Italy*

# Digital tools and environmental sustainability

## INTRODUCTION:

What are digital tools and which one we use? Do you know what impact they have to environment?

## BACKGROUND:

Digital tool are becoming increasingly popular, they are also used in education, but what effect do they have on the environment?

## Procedure:

At the beginning of class, students will be asked to list the digital tools we use or which can be used in education. After that students can tell what they think about digital tools in education and why it is important. Are the digital tools important for sustainability?

Students can be divided in 2 groups(or more) and one group should work on pros and other on cons on use of digital tools for environment. They will be given 10 minutes for the research and they can use computers for that purpose.

After the research students can present their findings.  
It's important that students becomes aware of following:

Even if the use of digital technologies in school is beneficial for the environment, reducing the use and waste of paper, and the carbon footprint of travel-related emissions while working at distance with colleagues and between students; but any digital action has also an environmental impact, connected with the use of electricity and related CO<sub>2</sub> emissions. Moreover, the production, and dismantling of digital devices and hardware should be considered, and the energy-consumption of data infrastructures that lie behind digital servers. Digitalization has resulted in a significant increase in greenhouse gas emissions, which contribute to climate change and global warming. Digital technology is responsible for 4% of global greenhouse gas (GHG) emissions.

## FUN FACTS:

- *Digital technology is often seen as positive for the environment, but is responsible for 4% of global greenhouse gas (GHG) emissions.*

## ASSESSMENT:

Teacher will do the assessment throughout observation during research and presentation of their findings in terms of valid answers on questions.

## EVALUATION:

For evaluation of lesson learned teacher will ask students to list (write down) their impression on how digital tools effects environment and what can be possible solution to this problem.