



**THE ITALIAN
POINT OF
VIEW**

**SCIENCE
GIRLS**



SEPTEMBER 2016.....WHAT IS ERASMUS+ SCIENCEGIRLS ABOUT?

“When we learned about the project we felt curious but a little bit reserved because it seemed to us difficult. But we decided to try because if you do not try, you’ll never know”

“How can we produce a guide for the other girls?”

“I like science, I would like to be an engineer, but my cousin...who is an engineer told me that she is the only female working in her company!”

“I don’t like science, there are too many things to study!!!”

OCTOBER 2016.....WHY DID WE DECIDE TO JOIN THE PROJECT?

*Because I
want to learn
more about
science*

*Because I like to
travel and meet
new people*

*Because I like to
work with people
from other
countries*

*Because I like to increase
my knowledge, find new
places and make science
more interesting.*

*Beacause I
want to improve
my english*

*To make new
experiences*



THE TEAM





NOVEMBER 2016...THE ITALIAN BACKGROUND

Girls choose University more than boys! 56% vs 44% *

But girls prefer Umanistic studies rather than STEM.... 74% vs 49% * (on the total M+F)

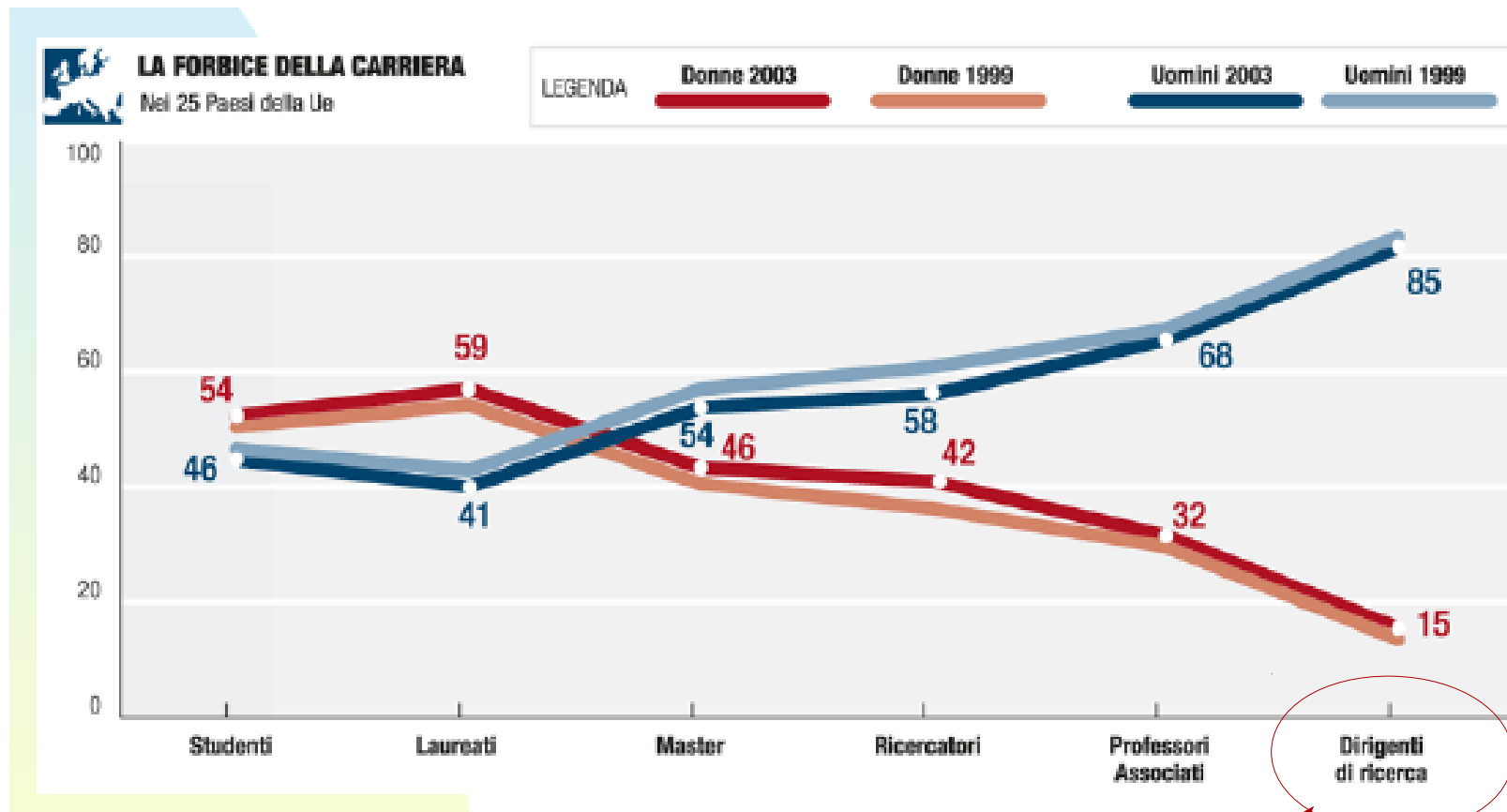
Only 18% of women choose Engineering studies!!! *

Women VS STEM**	2014
Graduated	50,6%
PhD	52,4%
researcher	45,9%
associate professor	35,6%
ordinary professor	21,4%

Source: *ISTAT
**Miur

NOVEMBER 2016...THE EU BACKGROUND

The number of women decreases considerably in high level careers



RESEARCH
MANAGERS



NOVEMBER 2016...THE GENDER GAP

The reasons???

ACCORDING TO US

The fact that since childhood male children have always been pushed towards something to be built, explain how things work, so as to lead them to something more scientific.

The fact that women have to manage family and work.

ACCORDING TO BIBLIOGRAPHY

The so-called **leaky pipeline**, or the progressive exit of women from the path of academic careers after the university education period has ended

The **glass ceiling**, a metaphor of a kind of invisible barrier, measured by a specific one index that expresses the difficulty of women to access top positions for obstacles that are often difficult to identify

DECEMBER 2016...THE SCIENCE GIRLS'

QUESTIONNAIRE: OUR POINT OF VIEW



What is the quality you appreciate in a scientist?

Her intelligence - Her tenacity - Her courage - Her independence -

Who will be you 10 years from now?

A researcher - an affirmed woman - a responsible person - a worker - a person who is doing all the best to realize her dreams



DECEMBER 2016...

MEETING THE ROLE MODELS

We would like to ask them something about their careers and the gender gap

- What role does you play in your department?
- What kind of activity do you do?
- When and why did you choose this career?
- Are there other people in your family who are involved in or had a career in science?
- What was your course of study?
- Are you happy with the work you do?
- Do you think there is gender discrimination in science?
- If yes, have you ever feel it?
- Do you think it is more difficult for a woman to pursue this career?
- If yes, why?
- What are, in your opinion, the qualities that a woman must possess in order to be a scientist?
- What are the goals of a person who is passionate about science?
- Have you ever met someone who, while developing a scientific career, did not seem suitable for this work?
- Have you ever had disappointments on this path?
- Have you ever had economic problems in dealing with this career?
- Did you have the support of someone to take this path?
- What advice would you give to girls who want to pursue a career in science?



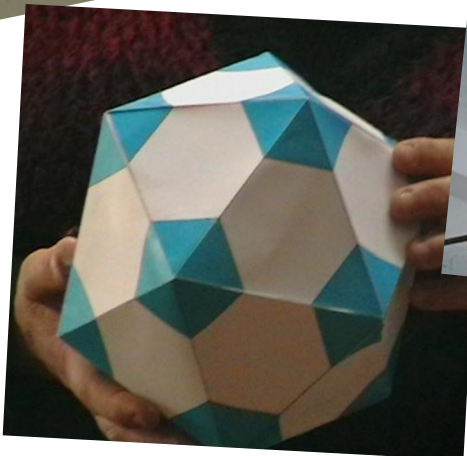
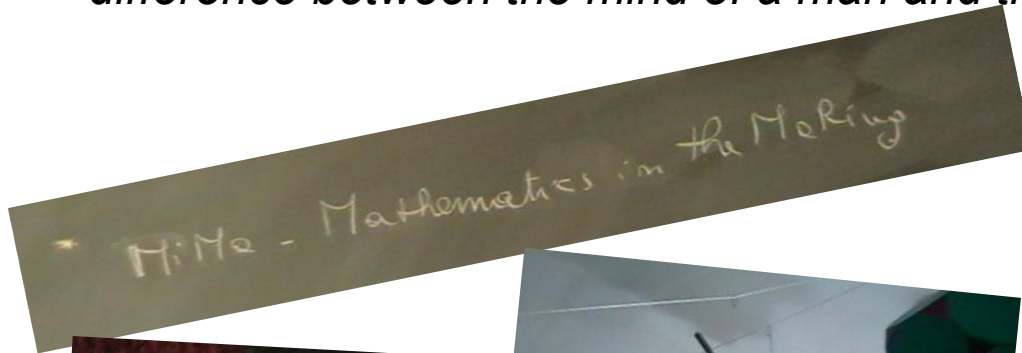
DECEMBER 2016...

MEETING THE ROLE MODELS

We would like to ask them something about their careers and the gender gap

MATH DEPARTMENT - PROF. EMANUELA UGHI

"The professor told us that making mathematical objects has always been her passion. Her results prove that one's will can really create great things and that there is no difference between the mind of a man and that of a woman!"



Do you think there is gender discrimination in science?

DECEMBER 2016...

MEETING THE ROLE MODELS

We would like to ask them something about their careers and the gender gap

ENGINEERING DEPARTMENT - DOTT. ANNALaura PISELLO, VERONICA CASTALDO, CLAUDIA FABIANI

"Their research group is composed only by women, in a field where they are very few"



Do you think there is gender discrimination in science?



DECEMBER 2016...

MEETING THE ROLE MODELS

We would like to ask them something about their careers and the gender gap

BIOLOGY DEPARTMENT - PROF. MANUELA REBORA

"There are many girls attending biology courses but still very few women in powerful career positions"

Do you think there is gender discrimination in science?

What are, in your opinion, the qualities that a woman must possess in order to be a scientist?

What advice would you give to girls who want to pursue a career in science?



DECEMBER 2016...

MEETING THE ROLE MODELS

We would like to ask them something about their careers and the gender gap

GEOLOGY DEPARTMENT - DOTT. GIULIA MARGARITELLI

"I'm at the beginning of this career, I never felt gender discrimination"

What are, in your opinion, the qualities that a woman must possess in order to be a scientist?



DECEMBER 2016...

MEETING THE ROLE MODELS

It was interesting because we saw how real scientists work and we could talk to them and interview them

We liked most AnnaLaura Pisello because she is very young but very determined and smart

We liked to see what is the meaning of “do research”

FEBRUARY 2017- JUNE 2017...

THE SCIENCEGIRLS JOURNAL

Working as a real
Scientific Newspaper
Editorial Office



#ViviNellaScienza

SCIENCE GIRLS

I progetti ERASMUS+ sono progetti finanziati dall'Unione Europea rivolti alle scuole che permettono agli studenti e ai professori di tutti gli stati membri di collaborare in diversi ambiti. Nel nostro caso è chiamato "SCIENCE GIRLS" ed è rivolto specificatamente alle ragazze per incoraggiarle a scegliere carriere in ambito scientifico. Il progetto dà la possibilità alle ragazze stesse, attraverso attività mirate, percorsi di ricerca e riflessione e incontri tra partners di progetto, di creare le linee guida per rendere più appetibili alle studentesse in tutta Europa le carriere nel settore scientifico/tecnologico come fisica, informatica, ingegneria, etc.

Mapa degli stati partecipanti: Italia, UK, Grecia, Turchia, Slovenia, Lituania, Spagna, Romania

Il nostro Istituto è l'unico in Italia a partecipare a questo progetto, e per questo siamo davvero orgogliose!

Erasmus+

IL NOSTRO TEAM: Martina V., Maria Letizia C., Elisa T., Madalina R., Beatrice S., Aurora I., Alessandra T., Jenny B., Emma B., Sofia M., Sara T., Maria Vittoria C., Elisa B., Giorgia T., Elisa S., Lisa R., Alessandra S.



9 JUNE 2017
SCIENCEGIRLS EVENT
Paciano, Palazzo Baldeschi



JULY 2017...

SCIENCE IN REAL LIFE

SUMMER CAMPUS SCIENCEART@UMBRIA

WE COOPERATE TO BUILD SCIENTIFIC
KNOWLEDGE

WE WERE TEAM LEADERS IN MIXED GROUPS
(BOYS AND GIRLS)

THERE IS A STRONG LINK WITH THE LOCAL AREA

WE COLLABORATE WITH CIRIAF - ENGINEERING
RESEARCH CENTRE – ROLE MODELS...they are
very pretty and smart!

THE PROJECT HAS BEEN APPROVED BY THE
EUROPEAN PLATFORM SCIENTIX AND IS NOW
AVAILABLE IN 8 LANGUAGES ON
<http://www.scientix.eu/projects/project-detail?articleId=674664>



Erasmus+



OCTOBER - DECEMBER 2017

INVESTIGATING IF THERE ARE SCIENTIFIC COMPANIES IN OUR LOCAL AREA

We identify almost 25 companies that are related to science and engineering...we didn't know our region was so rich....we have also an aerospace company!!! They build components for flying vehicles..." There are only two women working there...waiting for other women!!!

Angelantoni industries have 4 different companies inside: the administrative manager is a women..she congratulated us for the project!

"Unfortunately not all the companies has answered yet..."

OCTOBER - DECEMBER 2017

SCIENCE ACTIVITIES

**THE BALANCE OF
THE LEVER**

DNA EXTRACTION

**PLASTIC
RECYCLING**

**VOLCANO
ERUPTION**



DECEMBER 2017

AFTER ONE YEAR...

WHAT HAS CHANGED IN OUR MIND?

“Science is very important, because it is the study of human beings and all that surrounds them, therefore also the study of us, we human beings, all the same. For this reason, no distinctions must be made of any kind”.

“I discovered that science is important in everyday real life”

“I like to meet the role models because I saw directly how fascinating is their work”

“I don’t like to be a scientist, that’s all. I like to be many other things such as an interpreter, a turistic guide, and other similar things related with languages. This project taught to me that there have been many women who have fought to follow their dreams, and this is the important lesson I have learned, never give up.”

“Despite I haven’t choosed my future career yet, this should be a suitable career”

“I would like to be a researcher in the field of medicine and find the solutions for important diseases such as cancer”



WHAT IS SCIENCE IN REAL LIFE?

“To understand the links between science and our everyday lives

“To discover how scientists help humanity to solve problems”

“To meet people that work in the scientific fields in our local area”

“To see directly how role models work”

“To discover the link between science, math and art”

“To do experiments”

“In our school we would like to have more science labs”

“In our local area we have the University and many companies working with science related to real life problems, but many people don't know them”

IN CONCLUSION...

According to us, science is:

- *The way to understand universe*
- *A way to approach the knowledge of things*
- *An instrument to solve the problems of Humanity*

According to us, the great barriers that exist are:

- *The lack of communication between Companies, University, local administrative centre and the Primary and First Grade Secondary School*
- *The lack of time in our scientific curriculum to go out of the school and work in real life environments*



IN CONCLUSION...

AND FINALLY...

We don't feel discrimination in the way of teaching science in our school

We feel just a little bit discrimination from our male classmates when they say: "this is something for men" but not particularly related to science, they feel better than us especially making things that require muscle strenght



THANKS
FOR YOUR
ATTENTION

SCIENCE
GIRLS