

SARDINIA2021

Workshop

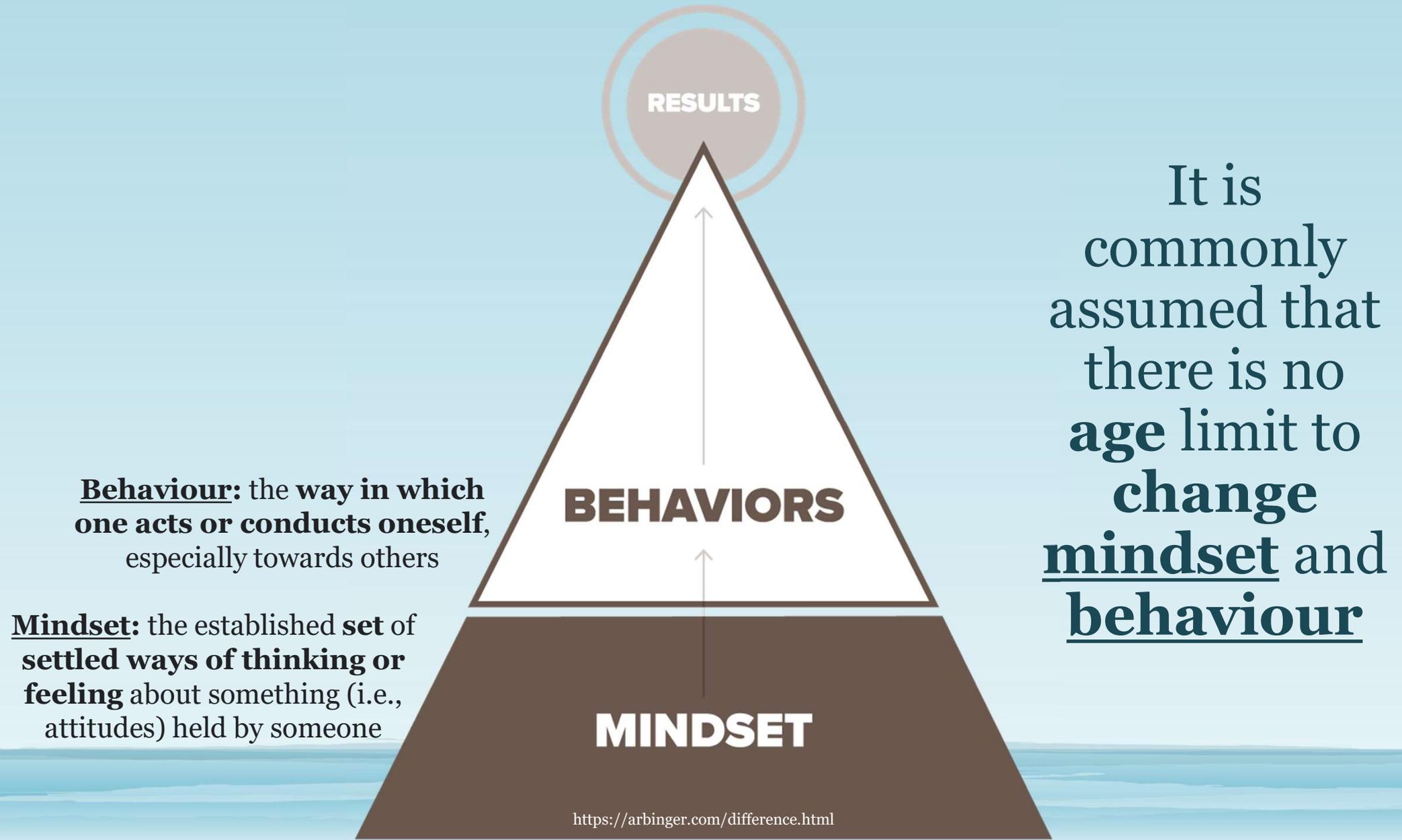
Education in Waste Management and Global  
Environmental Issues

# The Role of Young Generations: the Project Greenopoli

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**Childhood and youth education is the most effective means in the development of values, skills, behaviours and habits, which may be long lasting**

**Education:** the process of facilitating learning, or the acquisition of knowledge, skills, values, morals, beliefs, and **habits**

**Habit:** a settled or regular tendency or practice, especially one **that is hard to give up**



## Children and youth can easily pick up and understand environmental issues

**Environmental natives:** a generation that in their everyday behaviour, as a natural perspective, already shows respect for the environment in which they live



**Children and youth** can be encouraged to act as **agents of change** for promoting and enabling change to happen within their **extended family**

**Change:** an act or process through which something becomes different



**Childhood and youth education is a key means not only to make children and young people fully aware of their active role in a future sustainable society...**

A common statement:  
**“Children and young people are our future”**

I prefer to say:  
**“Children and young people are our present!”**



Children and  
young people are  
considered  
*Children of a  
Lesser God...*

Childhood, adolescence, youth,  
maturity, seniority are **not**  
**static categories**

We are all people in **constant**  
**transformation**

We are continuously **changing**  
**identities**

We are not children for all our life and...  
We were not born as we are now!



**We skip from one category to another: we move, while the age categories are fixed!**



Children and young people do exist, they do things, they are consumers, they are recyclers, they are persons like us...



Educating children and young people regarding the **importance of environmental issues** is essential, since **instilling the right behaviour** in them is also **beneficial to the behaviour of their families**



**Education is considered the foundation that should give cultural and ethical tools for understand why sustainable development is such vital for the present and future**

(UNESCO, 2016; 2008)

UNESCO, 2008. The contribution of early childhood education to a sustainable society. Paris: UNESCO.

UNESCO, 2016. Global Education Monitor Report. Education for people and planet: creating sustainable futures for all. Paris: UNESCO.



There is a **poor fit**  
between this  
awareness and **the**  
**existing school**  
**policies** in the  
**environmental**  
**and**  
**sustainability**  
**education**

(Aikens et al., 2016; Jickling and Sterling, 2017)

Aikens, K., McKenzie, M. & Vaughter P. 2016. Environmental and sustainability education policy research: a systematic review of methodological and thematic trends. *Environ. Educ. Res.* 22(3), 333-359. <https://doi.org/10.1080/13504622.2015.1135418>

Jickling, B., Sterling, S. 2017. *Post-Sustainability and Environmental Education*. Cham: Palgrave Macmillan.



Research in the field of the environmental and sustainability education highlighted the need of a **methodological change** from **transmissive learning** toward **active learning approaches**

(Chen and Martin, 2015; Kalamas Hedden et al., 2017)

Chen, J., Martin, A. 2015. Role-Play Simulations as a Transformative Methodology in Environmental Education. *J. Transf. Educ.* 13(1), 85-102. <https://doi.org/10.1177/1541344614560196>

Kalamas Hedden, M., Worthy, R., Akins, E., Slinger-Friedman, V., Paul, R.C. 2017. Teaching Sustainability Using an Active Learning Constructivist Approach: Discipline-Specific Case Studies in Higher Education. *Sustain.* 9(8), 1320. <https://doi.org/10.3390/su9081320>



# Need of **educators** with the **knowledge, behaviours, attitudes, values, and skills** required for practicing **environmental and sustainability education**

(Yuan et al., 2017; Ghorbani et al., 2018)

Yuan, K., Wu, T., Chen, H., Li, Y. 2017. A Study on the Teachers' Professional Knowledge and Competence in Environmental Education. *Eurasia J. Math. Sci. Tech. Edu.* 13(7), 3163-3175. DOI: <https://doi.org/10.12973/eurasia.2017.00710a>  
Ghorbani, S., Jafari, S. E. M., Sharifan, F. 2018. Learning to be: Teachers' competences and practical solutions: A step towards sustainable development. *J. Teach. Edu. Sustain.*, 20(1), 20-45. <https://doi.org/10.2478/jtes-2018-0002>



[www.greenopoli.com](http://www.greenopoli.com)

# Greenopoli = Condivisione + Sostenibilità

Greenopoli è un sito, una pagina facebook, un'idea, un progetto educativo, un metodo didattico, un libro

Cerca qui...



SARA

IL METODO GREENOPOLI

LE AVVENTURE DI GREENOPOLINO

PUBBLICAZIONI

GREENOPOLI VA A SCUOLA

GREEN SMILING REVOLUTION

INCONTRI



## Benvenuti nella Home di Greenopoli



## Greenopoli su Facebook



[www.greenopoli.com](http://www.greenopoli.com)



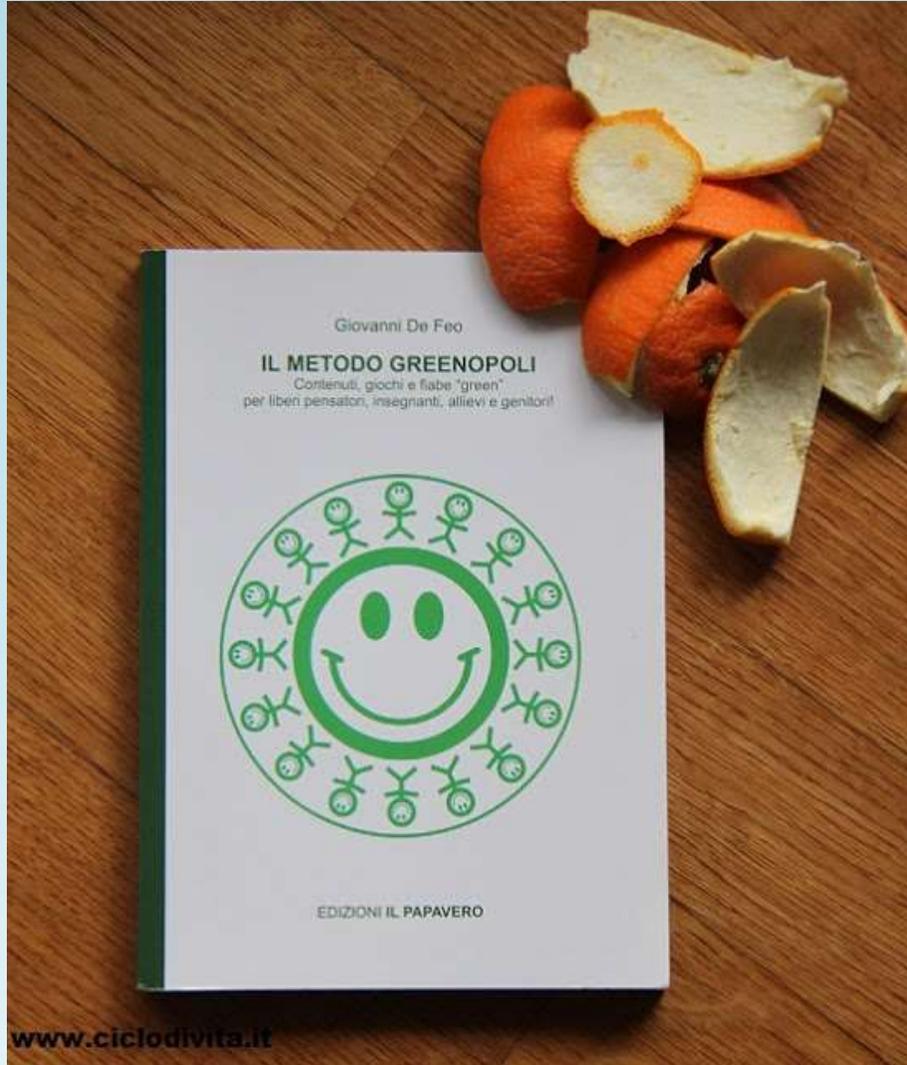
Greenopoli is an innovative education framework that has involved more than **300 schools** and around **60,000 students**, mainly in Southern Italy, from December **2014** up to now (the method was conceived in **2006**)

General aspects and tools



Two are the main keywords of Greenopoli: **sharing** and **sustainability**. The first one relates to the **teaching method**, while the second one to the **contents**

General aspects and tools



With **the Greenopoli method**, the role of the **educator** changes to assume the functions of **'moderator'**  
(De Feo, 2014)

General aspects and tools



The 'moderator' first makes **the students discuss about the topic** and then, at appropriate intervals, intervenes to **support and relaunch the discussion** or **introduce new concepts**

(De Feo, 2014)

General aspects and tools



The Greenopoli's moderator try to create a **friendly, cheerful, and regard-based environment**, which brings to **build up compatibility with the students**

General aspects and tools



The educator  
has to provide  
**leading  
questions  
and hints to  
uplift the  
student's  
level**

(Fisher, 2005; Feuerstein et al., 2010; Rosen and Falik, 2019)

Fisher, R. 2005. Teaching children to learn. Cheltenham: Nelson Thornes.

Feuerstein, R., Falik, L., Feuerstein, S. 2010. Beyond Smarter: Mediated Learning and the Brain's Capacity for Change. New York: Teachers College Press.

Rosen, R., Falik, L.H. 2019. The mediated learning experience in action. Jerusalem: Feuerstein Publishing House.



The Mayor!

The  
Greenopoli's  
bag



Everything becomes easier if **the educator communicates with enthusiasm, sympathy, a bit of comedy and spontaneity, showing all the passion for the topic being discussed**

General aspects and tools



The educator  
must avoid to  
put  
himself/herself  
on a pedestal

(even in a  
physical sense)

General aspects and tools



To do this, he or she must be **at the level of his/her interlocutors** as well as the most eager and curious to learn new things, **being a student among students**

General aspects and tools



Beyond more or less sophisticated techniques, **identifying oneself with those in front of us** is the obligatory starting point for a communication that wants to be truly effective

(De Feo, 2014; Gallagher, 2019)

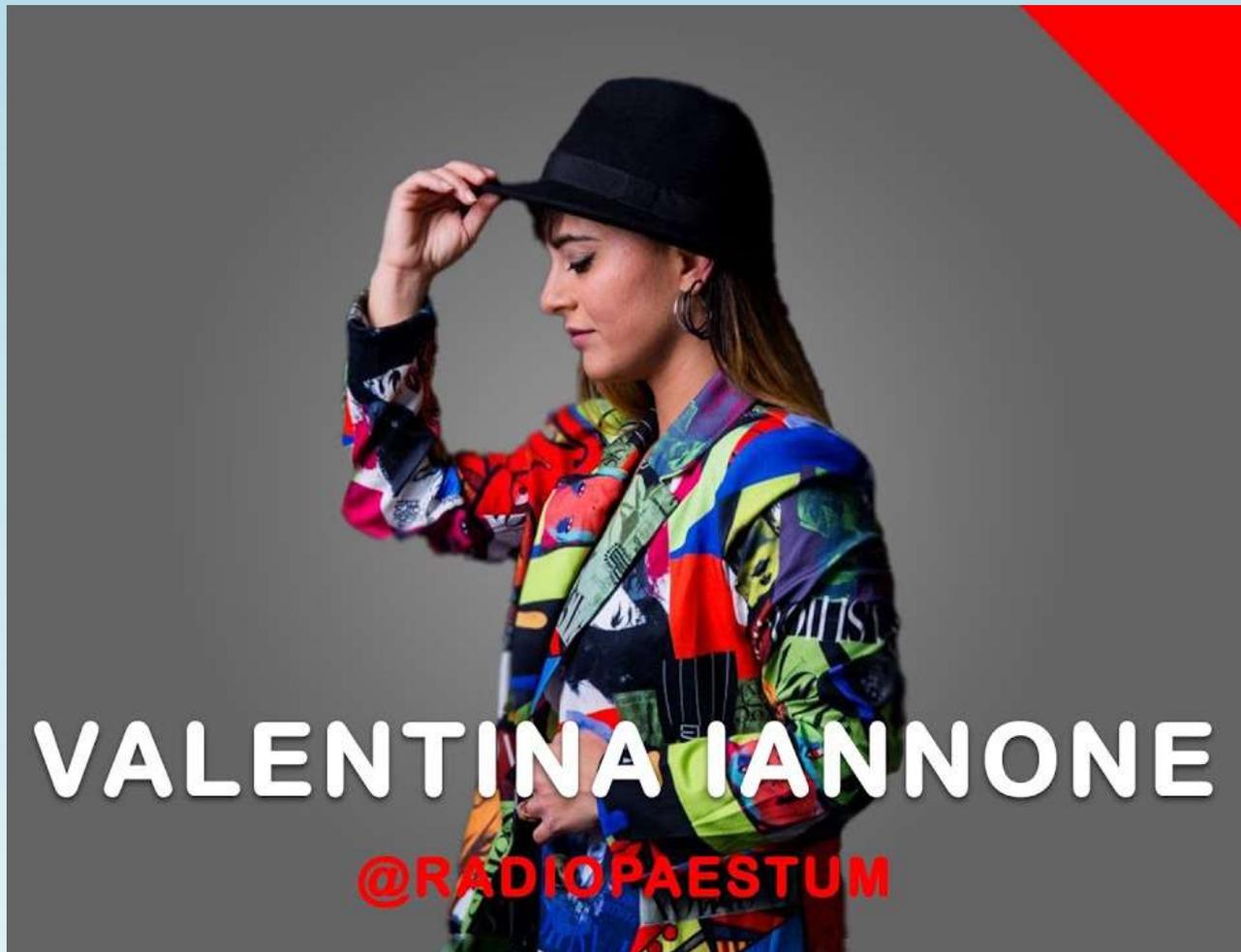
De Feo, G. 2014. *Il Metodo Greenopoli (The method Greenopoli)*, first ed. Il Papavero, Manocalzati (In Italian).

Gallagher, E. 2019. *The Effects of Teacher-Student Relationships: Social and Academic Outcomes of Low-Income Middle and High School Students*. New York: New York University. Available on line at: <https://steinhardt.nyu.edu/appsych/opus/issues/2013/fall/gallagher> (last accessed on 20 July, 2019).



The use of **simple rap songs with environmental content** is another innovative **tool** used during the education meeting performed with the Greenopoli method

General aspects and tools



**Valentina Iannone** is a **singer**, but she also has a **master's degree in Environmental Science!**



General aspects and tools



Experimental degree thesis in Environmental assessment procedure and multivariate analysis

*“The contribution of environmental sciences to the process of building a pedagogical path on environmental education in schools: application of the Greenopoli Method”*

Candidate:  
**Valentina Iannone**

General aspects and tools



The idea of environmental communication through raps, an activity that has been renamed as **‘green rapping’**, was born almost by chance, at the **request of some students** in a lower secondary school: this is the sense of the phrase **‘being a student among students’**



At the end of each single meeting, **the educator must have learned new things** from his/her students

Those who deal with **children** know that they are the ones who **teach you the best way to communicate with them**

General aspects and tools



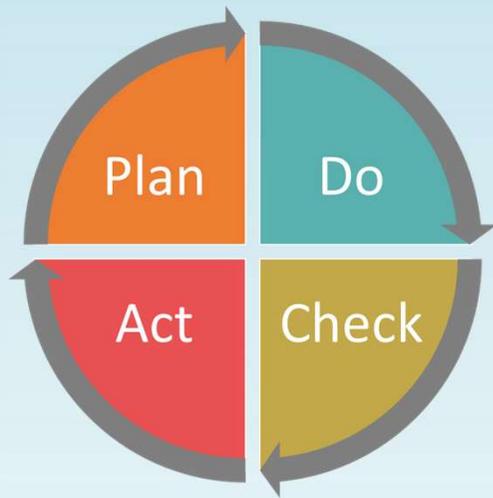
A **green rap** is generally set in a cappella form, using only **stomping and/or clapping** as a rhythmic body percussion beat like in “**We Will Rock You**” by **QUEEN**

General aspects and tools

An example of simplification of the way of transmitting apparently complex themes is the **‘Little rap of knowledge’**, which is one of the **‘quick rap’ of Greenopoli** (the rhymes work in the Italian version):

**Time patience passion and skills, think and rethink always pay the bills!**  
(*Tempo pazienza passione e competenza, pensa e ripensa crea la conoscenza*)

**Plan Do Check and Act, learning from mistakes is how you can react**  
(*Pensa agisci controlla correggi, impara dagli errori è così che ti migliori*)



- In the second verse of the rap, it can be easily recognized the **‘Deming cycle’** based on the **P-D-C-A approach**
- The aim is to educate children and youth about **‘logical and systemic thinking’** as well as the importance of **learning from mistakes**
- **The two ‘C’: Check and Correct**

General aspects and tools

## About learning from mistakes...

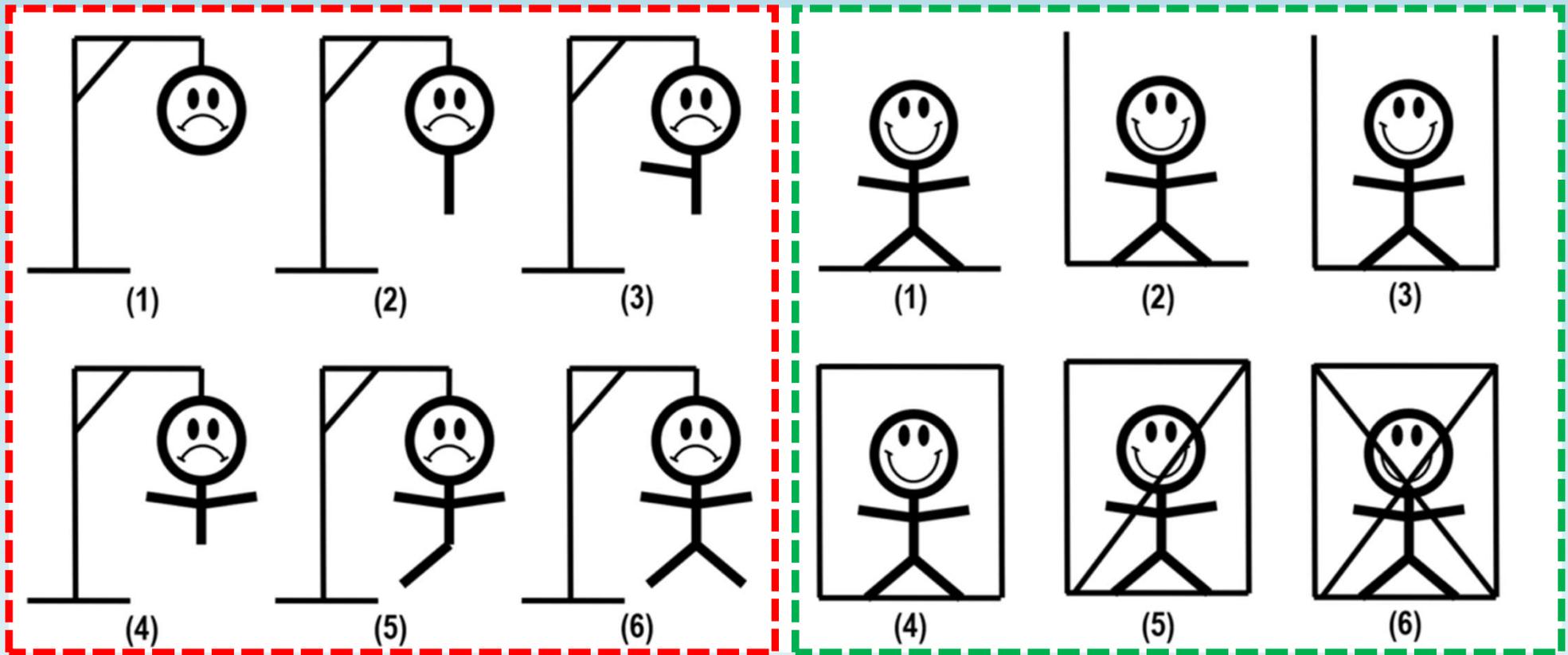


**Maria Montessori**

*“In regard to error, it is better to have a friendly attitude towards error and to consider it as a companion who lives with us and **has a purpose**, because it really has one.*

*Wherever we look, we will always find **Mr. Error!** If we want to work towards perfection, it is better to pay attention to the mistakes because **perfection can only be realized by correcting errors** and they must be fully acknowledged, remembering that they exist just as life itself exists.”*

# About learning from mistakes...



From **“hangman”** to **“jailedman”** with **Greenopoli**

General aspects and tools



In the last six years of educational activity, several raps have been written on the issues of sustainability and waste management

One of these is  
**‘The ugly rap of waste’**  
(‘Il brutto rap dei rifiuti’, in Italian)

General aspects and tools

**Chuck out and throw away, sending them away**

**It's not so strange, it's time to change!**

*(Buttare gettare li voglio cancellare. Rimettiamoci a pensare, è tempo di cambiare!)*

**Waste and garbage, trash and rubbish**

**What bad words, they have to vanish**

*(Rifiuti, immondizia, pattume e spazzatura. Che brutte parole a me fanno paura)*

**Reduce and reuse, nothing to lose**

**Respect for the environment is the best enlightenment**

*(Ridurre e riusare, da qui voglio partire. Rispetto per l'ambiente, pochi soldi da gestire)*

**Buy and consume a lot, but life is not a rot**

**Avoid such a shame, life is not a game**

*(Compra e compra, spreca tanto e pensa poco. A questo io non credo, la vita non è un gioco)*

**Collect and separate, fix and regenerate**

**Collect and separate, diminish the fee rate**

*(Separa separa, aggiusta e ripara. Separa separa, la bolletta è meno cara)*

**General aspects and tools**

**Waste management education** is one of the main activity developed by Greenopoli **from kindergarten to higher education and over...**



**Greenopoli is aimed at children from three to ninety-three years old**

# Waste management education is one of the main activity developed by Greenopoli from kindergarten to higher education and over...

kindergarten



primary school –  
first two years



primary school –  
last three years



lower secondary school



upper secondary school



higher education



For more details about the project Greenopoli, please come to the A15 session

# FRIDAY OCTOBER 15 MORNING

**SESSION A15 / CENTRAL HALL / 9:00-10:30**

## **EDUCATION AND PUBLIC PERCEPTION IN WASTE MANAGEMENT**

*Chair: Rainer Stegmann (DE)*

*G. Calderari, K.Cipri, C. Cucuzzella (IT)*

How GREENUS Project responds to the Education needs in Waste Management in Asia

*G. De Feo (IT)*

Waste management education with the Greenopoli project: from schools to television

*O. Janikowska, J. Kulczycka, G. De Clercq (PL)*

Deliberative democracy as the education tool for sustainable municipal waste management

*E.M. Mukhtar, I.D. Williams, P.J. Shaw (GB)*

Out of sight, out of mind: fundamental factors in waste management systems and their visibility

*C. Maiorana, E. Elamè, M.C. Lavagnolo (IT)*

Waste Management education projects in Cameroon: results and challenges in 10 years

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# Thank you for your attention!

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