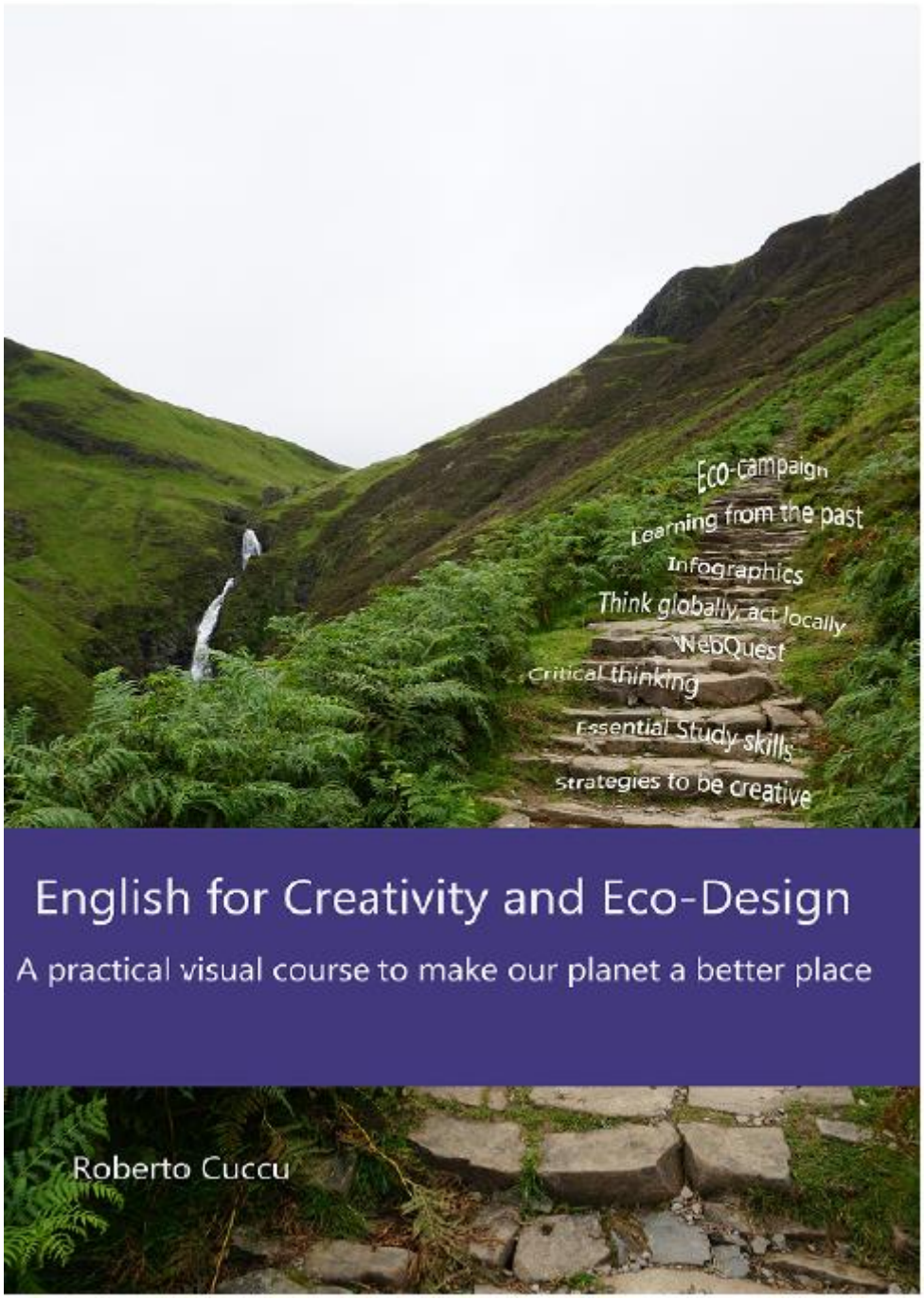


Introduction to the Book

Equipped with a variety of visual organizers to describe relationships, processes and conveying a powerful message, this book introduces the study skills required in the study of a scientific subject, in particular one connected to the environment. The language and visual skills are eventually used in project works based on lessons we can learn from the past and on actions to take towards a more responsible society.

When you think it's too difficult to proceed in your learning, because of the complexity of what you have in front of you, instead of giving up, why not find another possible perspective that allows you to find a way to

proceed using a different approach. There are creative ways to learn and use your learning not only to know about a specific subject but also to use your new knowledge to make our planet a better place.

This work shows instructors and learners how to ask themselves the right questions, scaffolding their inquiring process until they become independent, autonomous and socially responsible citizens.

About the Author

Roberto Cuccu has been a teacher of English Language and Literature in an Italian Secondary School.
He collaborated with the University of Cagliari, Sardinia, as contract professor for ESP (English for Specific Purposes) and for Use of Multimedia in Teaching English. In addition, he has worked as teachers' trainers, educational multimedia consultant and designer for online museums, using the M.U.S.E. (Museums United with Schools in Education) approach, based on multiple intelligences.

Realizing the central role of human development in a digital world, he has been experimenting ways to ride these two horses at the same time: a holistic approach to learning along with enhancing learning and teaching through the use of Digital. He has published, among others, a book on out-of-the-box experiences that he has proposed to his students, based on emotional involvement, visualization and collaboration.

Purpose of the Reading Guide

This Reading Guide should help to have a general idea about the facts described in this book, reflect on the relationship between Science and Ethics, and see how could we plan our future in a way that is Eco-friendly.

Overview of the Book

This book begins with the relationship between Creativity and Science. Then it moves to how to develop the right study skills to understand Science, in particular the use of visuals, and then it describes how to face an ecological disaster. There is a chapter dedicated to cooperative learning in order to achieve a project together with others. The topic is the best source of alternative Energy for a country.

The following chapter is about the use Infographics and how to use them to achieve sustainability.

It follows a chapter on the famous Black Death in the London of the Middle Ages and also how to dispose of waste in a way that is not dangerous for the planet.

The next one is about Eco-design, creating something that might help people to be aware of the pollution problems we have on the Earth. Finally, there is a last step that is how to create a videographic on a specific environmental challenge.

Key Themes and Main Ideas

- Approaches to Creativity in Science and how to avoid the typical obstacles to that.
- A holistic approach to creativity, between Digital and Analogic strategies, Abstract and Emotional learning.
- The right studying skills to put into practice when analyzing a scientific text.
- How some people reacted to an ecological disaster, making possible to solve the problem.
- The use of Web Quests to help people work and find a solution together.
- Sustainability, i.e. the capacity of the earth's natural systems and human cultural systems to survive, flourish, and adapt to changing environmental conditions into the very long-term future.
- The use of Infographic, i.e. the art of storytelling through data visualization.

- The creation of an Eco-campaign, what to do, what instruments to use, and how to do it.
- How to face contemporary challenges, the role of sustainability, and how to learn from the past.

Reading Comprehension Questions

- What is an Infographic?
- What is an Eco-Design?
- Is there a connection between what happened in the far away past and our present condition?

Personal Reflection Questions

- Have you ever felt alone and without any help in front of a damage to the environment around you?
- When facing a problem, if you feel stuck and without a way to progress, have you ever thought that there are strategies that help to find creatively a solution that allows you to move forward?
- In the story of the Nashua River, we have seen that a single woman was able to find a way out of a natural disaster caused by a factory. Do you think you would have the strength of this woman to fight something that touches the area where you live?

Practical Exercises and Activities

- When you find a scientific text, sometimes it is difficult to understand what it is about and the main ideas. Try to put into practice the strategies described in the first chapter of this book and see if you can overcome the initial difficulty.
- Try to solve a problem and find a solution to something working together with other people. You need to work in a cooperative way, accepting the different ideas and finding ways to use all of them to find a solution.

Final Reflections and Conclusion

The case study introduced in the second chapter aimed at demonstrating just the opposite: even a single person can do something to change the conditions in which we live. Of course, it cannot happen in a single moment or without any effort. To achieve the incredible results of reversing the condition of a dead polluted river into the previous state of pristine, uncontaminated eco-system, Marion Stoddart had first of all to study, to acquire new skills and prepare herself to face and deal with specific challenges. This is true for all of us: if we want to have a say on how to deal with an environmental problem, we should have or acquire at least an elementary scientific knowledge of the forces that regulate and control it. And being English the international language for science, being able to read and understand scientific text in English is a way to have a global view of what is happening in our planet. We cannot limit ourselves to a local knowledge.

We need to have a global knowledge of events, but we should also find a way to use that knowledge to solve specific challenges present locally, where we live. And in doing so, we might creatively find solutions that may be different from those suggested for a global world.

The past is not just something past, we can learn from what happened before, among other things also because there some aspects of human nature that seem to have not changed over the centuries. Probably this is why we continue to make the same mistakes over and over again.

In recent years, especially with the technological revolution that allowed users to be more than just passive receptors of what someone else published, with the widespread use of mobile phones and of social media, the walls of the classroom are only virtually there. Emotionally and intellectually, they do not stand any longer. We are connected to the outside, and what happens outside a classroom should find a place in the learning activities organized in schools.