high schools or during project courses and environmental education programs in middle and high schools.

Some of the teachers expressed interest in implementing this educational material at their schools. The second phase of the project has just started. To obtain evidence from both levels of secondary education and from applications on different types of courses, two school implementations were scheduled. The first implementation group consisted of high-school students (aged 16) attending the "Natural Resources Management" course, and the second group was middle-school students (aged 14) attending an Environmental Education program. The main obstacle was finding time to implement it at school, as the educational material needs four consecutive teaching hours to be completed (each one lasts 45 minutes) and could possibly disrupt the school program. However, with careful planning, everything ran smoothly. The course with the high-school students had very positive results, as students immediately engaged with the subject. Some of them said, "it is the first time that we actually perceived our mobile phones as an educational medium, instead of something we are not allowed to bring in the classroom." Students produced tanglegrams, which although were simpler than those of the teachers, showed they are active systems thinkers capable of perceiving cause and effect relationships. One student at the end of the intervention asked, "What can we do with all the mobile phone devices we keep in drawers in our homes? How can we reuse their precious materials without negatively influencing the lives of people in underdeveloped countries? Are there recycling companies that undertake this process in a socially responsible manner?"

After the success of conducting the high-school course, we had the challenge of adapting it for middle-school students, who may struggle with some of the concepts. However, by using simple language and videos suitable for eighth graders, they were able to deeply engage in the activities. The teacher noticed some of the students who rarely participated in classroom discussions gained confidence and expressed their opinions openly without reservation. Another student mentioned, "Perhaps the responsibility of sustainable production, consumption, and disposal of electronics lies not only with the individuals, but also with the corporations that are involved in the process," but "nonetheless, my mobile phone device will never look the same to me now that I know the story behind it." At the end of the session, some of the students were likely to discuss starting a campaign at their school to collect unused or damaged mobile phones for recycling and give them to companies that could disassemble and recycle them in Greece.

By the end of the school year 2016–2017, 56% of the teachers who participated in the two training seminars said they had used all or part of the educational material in their classrooms. Some suggested that this material could be used to measure knowledge and attitude change in students by asking them to complete the "designing the green mobile phone of the future" activity at the beginning and end of the educational intervention to compare the outcomes. An assessment metric was then created for this activity.

An unanticipated result of my involvement in the IMOS course and the positive experience of taking it to Greek schools was my decision to pursue a PhD in assessing students' systems of thinking and behavioral change for more sustainable lifestyles. One of the most important moments in this journey was when I was invited to present this effort during the Education Symposium at the 2017 MRS Fall Meeting, which was received with enthusiasm and enabled me to forge strong collaborations with various educational institutes around the world. The results of this work are published in the *MRS Advances* journal (https://doi.org/10.1557/adv.2018.64), where interested readers can find more details about the educational material and implementation outcomes.

International School of Materials for Sustainable Development & Energy first course to be held July 7–13 in Italy

www.erice-energy-materials2018.ct.infn.it

The first course of the International School of Materials for Sustainable Development & Energy, "Materials for Energy and Sustainability," will be held July 7–13, 2018, in Erice, Italy.

The aim of the school is to present state-of-the-art and future perspectives for materials applied to the generation and storage of renewable and sustainable energy. Lectures will merge physics, chemistry, and engineering knowledge. A general overview of the global energy landscape will be presented by discussing conventional energy sources and next-generation nuclear production. Topics include the global warming issue, conventional and sustainable technologies, solar-energy conversion (photovoltaic and thermal), thermoelectric energy conversion, solar fuels, wind energy conversion, fuel cells, storage, and vehicles. Students, postdoctoral fellows, and established experts are all encouraged to attend.

Chairs are David Cahen, Weizmann Institute of Science, Israel; David Ginley, National Renewable Energy Laboratory, USA; Abdelilah Slaoui, Institut d'Électronique du Solide et des Systèmes–Centre National de la Recherche Scientifique and the Université de Strasbourg, France; Antonio Terrasi, Università degli studi di Catania and the Institute for Microelectronics and Microsystems–Italian National Research Council, Italy; and Anke Weidenkaff, Universität Stuttgart, Germany.

The deadline for registration and travel forms is June 15. More information can be accessed from the event website at www.erice-energy-materials2018.ct.infn.it or by email at antonio.terrasi@ct.infn.it.

https://doi.org/10.1557/mrs.2018.110 Published online by Cambridge University Press