

ESERA TRAVEL AWARDS 2022

Èlia Tena Gallego, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain

Visiting professor: Maria Evagorou at the University of Nicosia (UNIC), Nicosia, Cyprus

To the ESERA President, Board and Travel Award Committee,

This visit had started to be planned two and a half years before 2022 when my Catalan supervisor, Dra. Digna Couso, asked me about doing part of my PhD research abroad to learn with and from others. Unfortunately, the COVID-19 pandemic and its consequences postponed my plans. After two years mostly working from home, and a cyber-attack on my university, we reconsidered the option of applying for the ESERA travel award to visit Dra. Maria Evagorou at University of Nicosia (UNIC) in Cyprus. This award helped me to make this plan real, and to pursue my research goals.

The main objective of my Ph.D. research project is to investigate the conceptual understanding and inquiry skills of 10-12-year-old school students involved in a teaching and learning sequence (TLS) on the topic of air pollution. The TLS is aimed to improve both ideas related with the particulate model of matter, and inquiry skills of primary school students. Particularly, we focus on the analysis on how this TLS could improve the following practices for science classrooms (NRC, 2012): constructing explanations, asking investigable questions, and planning and carrying out investigations.

I spent three months at the University of Nicosia, partly supported by the ESERA travel award. The intended aims of this period were three: firstly, to share and enlarge part of the science education theoretical framework and results discussion, especially focused on the importance of teachers' scaffolding in primary school education inquiries. Secondly, to discuss part of the data analysis to improve and refine the quality of them due to external discussion and validation; and third, to start writing an article about the evolution of students' competence in planning and carrying out investigations taking into consideration teachers' oral feedback and questions.

In this perspective, I met Dra. Evagorou several times to discuss different parts of my research. From the meetings and journal articles, working papers shared with me, I had an incredible feedback that helped me to clarify most of the parts of my research, especially the theoretical framework and results discussion. The reflections are also being productive for refinement of the quality of the methodology used. What is more, these meetings helped me to go in deeper in the analysis of the teachers' feedback and questions and their impact in the development of students' skills to design scientific research questions, planning and carrying out investigations. These reflections will be part of both my dissertation and a paper which we started working on during my visit. Discussions with Maria Evagorou went far beyond the specific topics of my research, this introduced me to some perspectives on science education that I would really like to go to deepen in the years that have to come.

Most importantly, my visit to Cyprus and Maria Evagorou's support delighted me an important and necessary time for the reflection about my thesis and the inspiration to write an important part of my dissertation document and to start writing an article together.

Additionally, during this time I had the opportunity to share part of my research with Master and PhD students from another Cypriot university, University of Cyprus, and with one of their main professors, Dr. Marios Papaevripidou. Their inspiring questions during the seminar helped us to improve part of the methodology explanations and results discussion.

On the other hand, the visit also allowed me to be involved in some activities of a European project. This experience had an important background as a future researcher in science education because it helped me to understand how to engage people in the process to identify, reflect, and propose solutions/actions to some problems using a Hackathon approach. Furthermore, knowing the designed materials developed within this European project and experiencing in first person their implementation with pre-service teachers and other university students, could become a landmark for my future implication in international projects.

I would like to highlight that this visit became a milestone not only for my PhD research but also in my development as a young European researcher in science education and as an elementary school teacher. Professor Evagorou enabled me to acquire new theoretical and methodological perspectives in science education, and also to be interested in new research topics. It brought me the opportunity to know how educational research is done in other countries and appreciate the uniqueness of diverse research approaches. Moreover, the ESERA travel award had an impact on a personal level too because this opportunity helped me to enhance my formal and informal English skills and deepened my intercultural competences.

All in all, I would like to finish this letter, telling “ευχαριστώ” to Dra. Evagoroy for this amazing opportunity, for their warm welcome and for all the support before, during and after the visit. Especially thanks for your always professional feedback that helped me to improve my research and my vision as a science education researcher. Thanks for all the opportunities that you brought me during my visit and that keep the science education flame burning inside me. A heartfelt THANKS (in capital letters) to ESERA for providing me with this amazing opportunity. Without their support, it would have been impossible to have this amazing opportunity.

I am sure that the visit will bring us the opportunity of future collaborations between both UNIC and UAB science education research groups in projects, ESERA symposia and publications. Probably, one of the best descriptions about the impact of this experience on me was a twitter post done during Lucy Avraamidou’s online lecture about identities: *“How it’s life... following from UNIC in Cyprus, Lucy Avraamidou lecture in U. Almería about identities and thinking that since 3 months ago, Cyprus has become part of my identity as a science education researcher but also as a person!”*.

Your faithfully,

A handwritten signature in black ink, appearing to read 'Elia', with a long horizontal line extending to the right.

Èlia Tena (PhD Student, Departament de didàctica de la matemàtica i les ciències experimentals, UAB)