

Our school's Earth and Space Sciences Club: 12 years promoting interdisciplinary explorations

Ana Margarida Maria (1) and Hélder Pereira (2)

(1) Escola Secundária de Loulé, Portugal (aferreira@es-loule.edu.pt), (2) Escola Secundária de Loulé, Portugal (hpereira@es-loule.edu.pt)

During the past 12 years, we have been engaging secondary level science students (15 to 18 years old) in the extracurricular activities of our school's Earth and Space Sciences Club, providing them with some of the skills needed to excel in science, technology, engineering, arts, and mathematics (STEAM).

Our approach includes the use of authentic scientific data, project based learning, and inquiry-centred activities that go beyond the models and theories present in secondary level textbooks.

Moreover, the activities and projects carried out, being eminently practical, also function as an extension of the curriculum and frequently enable the demonstration of the applicability of several concepts taught in the classroom in real life situations.

The tasks carried out during these activities and research projects often require the combination of two or more subjects, promoting an interdisciplinary approach to learning. Outside of the traditional classroom settings, through interdisciplinary explorations, students also gain hands-on experience doing real science. Thereby, during this time, we have been able to promote meaningful and lasting experiences and spark students' interest in a wide diversity of topics.