

The rocks and fossils of my school... as educational and scientific divulgation resources

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In a city, on walls, pavements, street furniture and monuments, it is normal to find rocks with fossils and curious features, full of interesting stories. This geological and paleontological heritage, usually ignored by the majority of citizens, has an enormous potential for use in science; education; conservation; communication; tourism and leisure.

The fact that the walls and floors in the Silves Secondary School are covered with different types of rocks with peculiar characteristics and full of an enormous fossiliferous diversity, gave us the opportunity to explore the potential of this geodiversity in a school context.

The main objectives defined in this project were: to promote the geodiversity present in the school building as an educational (sciences' teaching) and communication (scientific literacy and divulgation) resource; to diversify the educational materials and resources available in the school; to involve students in a concrete project, with a practical and multidisciplinary approach; to stimulate students' interest for science and knowledge; to promote the education of more observing, conscientious and respectful citizens of the natural and cultural heritage.

In the execution of the project, we highlight the following activities: theoretical and practical work sessions (bibliographical research, field work, analysis and discussion of results, evaluation, ...); inventory of rocks and fossils ("cartography" of the school building, written and photographic record, identification of rocks and fossils, ...); selection of places of interest; production and compilation of contents - texts, photographs, diagrams and illustrations (students of both science and technology, and arts courses); production of a digital guide with sections for students of different levels of education, teachers and other interested parties (available on the school website); production of identifying and informative contents for boards in the places of interest; edition and graphic design of the digital guide and informative boards (students of the graphic design course); practical classes, guided tours and other promotion and divulgation initiatives.

In the end, with this project, students, teachers and the rest of the educational community, will regard rocks and fossils differently.

In the next school year (2017/2018), we intend to carry the work forward, extending it to other schools in Silves county.

Some of the papers that inspired our project:

- Cachada, M., Santos, A., Alfaro, E., Silva, C. S. (2012). Experiencias de aprovechamiento educativo y turístico de recursos geológicos en las ciudades de Huelva, Sevilla y Córdoba. Comunicaciones XVII Simposio sobre Enseñanza de la Geología. Universidad de Huelva, 64-70
- Fuentes, I., Calzada, E., Llamas, T., Tejerina, A., Crespo, M., Pereiras, L., Crespo, T., Domínguez, L., Cabezas, L. (2016). Lugares de interés geoescolar en el medio urbano. Potencialidad de las ciudades para la enseñanza de Geología. Enseñanza de las Ciencias de la Tierra, Vol. 24 (2), 195-201
- Rodrigues, L., Agostinho, M., Manteigas, R. (2014). Geologia e Paleontologia Urbanas – potencialidades e aplicações em três cidades do Algarve. Comunicações Geológicas, 101, Especial III: 1359-1363
- Silva, C. M., Cachão, M. (1998). "Paleontologia Urbana": percursos citadinos de interpretação e educação (paleo)ambiental. Actas V Congresso Nacional de Geologia, Comunicações Instituto Geológico e Mineiro, Lisboa, 84 (2), H33-H37