

## **The Lightbulb Moment – the importance of fieldwork as a link between the classroom and the real world**

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All teachers love the light bulb moment; that moment when a student says, "Ah ha, I get it!" and makes the move from remembering to understanding. This boosts their confidence, leading to increased engagement with the subject and, in turn, increased progress and enjoyment. For many young geologists such moments occur outside the classroom when they are given the opportunity to carry out fieldwork. Understanding involves making links and investigations within the field allow students to make these essential links between actual observations and theory.

All A-Level geologists at Sir William Borlase's Grammar School are given the opportunity to take part in a five day fieldtrip. This poster celebrates key 'lightbulb moments' that occurred during fieldwork to the famous Jurassic Coast, England. Students investigated the geological setting at Kimmeridge Bay where the cyclic sedimentation in the Lias helped their understanding of orbital obliquity and precession. The processes of fossilisation and preservation were examined at West Bay and in the upper Jurassic at Bowleaze Cove, which also enabled students to appreciate the incompleteness of the fossil record. Modern day processes and coastal management at Swanage allowed sixth formers to understand the non-permanent nature of landscapes and the difficulties encountered when attempting to conserve eroding areas.

Therefore, the chance to get outside the classroom and study in the field is an invaluable opportunity for students to make those all important links through investigative learning and to develop a deeper understanding of the world around them.