



CASE STUDY

03: CREST AWARDS THROUGH PROJECT-BASED LEARNING

CREST'S FLEXIBLE FRAMEWORK ENCOURAGES THE DEVELOPMENT OF INNOVATIVE STEM-FOCUSED PROJECTS BY INDIVIDUALS OR GROUPS

SUMMARY

In May 2009, teachers at Charlton School gave Year 8 students the chance to undertake independent projects based upon their individual enthusiasms. They saw CREST's value in supporting independent learning, promoting cross-curricular work and encouraging students to reveal a wider-than-anticipated range of skills.

SCHOOL FACT FILE

School: Charlton School, Shropshire

Type of School: Mixed Comprehensive Specialist Science College

CREST Awards achieved:

■ Bronze level: 30 Year 8s

Skills

- Independent learning
- Enhancement of cross-curricular skills
- Personal, learning and thinking skills
- Practical and enquiry skills

Links to the curriculum

- Environmental science, Applications and implications of science, Solving mathematical problems, Application of IT skills

"WE WANT STUDENTS TO BE AS INTERESTED IN SCIENCE AND WE WANT TO BE THE FLAGSHIP DEPARTMENT... OUR STUDENTS WERE VERY ENGAGED!"

Emma Powers, Assistant Director of Science



CHARLTON SCHOOL WANTED TO GIVE ITS STUDENTS A FLAVOUR OF REAL-LIFE SCIENCE. BUILDING ON THEIR EXISTING KNOWLEDGE, THE STUDENTS SAW THE APPLICATION OF SCIENCE IN A VARIETY OF ENGAGING AND UNFAMILIAR CONTEXTS.

PUSHING THE BOUNDARIES

Teacher, Abbie Wills gave thirty gifted and talented students the opportunity to achieve CREST Bronze Awards. Given free rein to choose their projects and explore their own interests, the students worked alone, in pairs or in small groups. CREST Bronze Awards usually involve around 10 hours of project work – while 'CREST in a Day' is increasingly popular in many schools. Charlton operates a two-year Key Stage 3 and these students had completed their SATs early, so Abbie let them take their time. Beginning in mid-May, the students had 6 weeks to complete their projects.

"THE STUDENTS TALKING ABOUT THIS PROJECT AND WANTING TO COME INTO LESSONS SPREADS DOWN INTO OTHER GROUPS:"

Emma Powers, Assistant Director of Science

The students developed a range of ingenious projects – and demonstrated a wide range of skills in order to make things work. Projects included 'All at Sea': here, a team made models simulating coastal erosion and created a video documentary to explain how coastal erosion occurs. The group worked hard to make their presentation compelling and engaging. Their efforts were presented both to other Year 8s and to staff members in the Science department.

"YOU ALWAYS END UP BEING SURPRISED BY WHAT THEY COME OUT WITH. YOU DEFINITELY SEE A BIG RANGE OF SKILLS THAT YOU DON'T NECESSARILY KNOW THE CHILDREN HAVE:"

Emma Powers, Assistant Director of Science

RECOGNITION OF SUCCESS

Having completed their projects, the students received their CREST Bronze Awards at an end of year assembly in front of the whole school.

CREST Awards are supported by:



we would also like to thank
Network Rail



British Science Association
www.britishsienceassociation.org

Registered Charity No. 212479 and SCO39236

AN ONGOING INVOLVEMENT

Charlton School has been involved with CREST since 2006 and benefits from the scheme's positive contribution: CREST helps to underpin the school's commitment to cross-curricular work, stimulates interest in STEM and helps to spread excitement across the curriculum. Charlton often uses CREST to link to its work on eco-schools, which takes place within the school's outdoor classroom.

CREST helps teachers at Charlton to become more aware of the range of skills (both science and non-science) possessed by their students. This has given them more ideas for new developments. As they move towards project-based learning, CREST has also encouraged teachers at the school to be more flexible and more open to fresh ideas.

"WITH THE SHORTAGE OF SCIENCE TEACHERS AND SCIENTISTS ACROSS LOTS OF DIFFERENT EMPLOYMENT SECTORS, WHAT WE WANT IS FOR STUDENTS TO GET ENGAGED IN SCIENCE:"

Emma Powers, Assistant Director of Science

LOOKING TO THE FUTURE

Charlton School will definitely stay involved with CREST. In fact, it would like to broaden the scope of its involvement. Having seen students increase their communications skills, work well both individually and with others, and develop in confidence, the school is now looking to engage with other schools using CREST. It is also considering using CREST Awards as an entry point to their Regional Big Bang Fair.

Find out more about CREST Bronze Awards at:

www.britishsienceassociation.org/crest

or email crest@britishsienceassociation.org

