

How do teachers respond to Science&Engineering Club Boxes and how are they being used in practice?

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7 December 2012

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UK Science Clubs

It is the UK Government's ambition to establish a STEM Club in every secondary school or college (11+ years) in the country.



Why run Science Clubs?

- Motivate and build confidence in young people who struggle with STEM subjects
- Provide an extra outlet for children who show aptitude and are interested in furthering their learning



What is the Typical School Science Club Set-Up?



- Once a week for 1 hour
- 10-20 students turn up
- Off curriculum – NOT writing; tests or exams
- FUN!



How can we help?

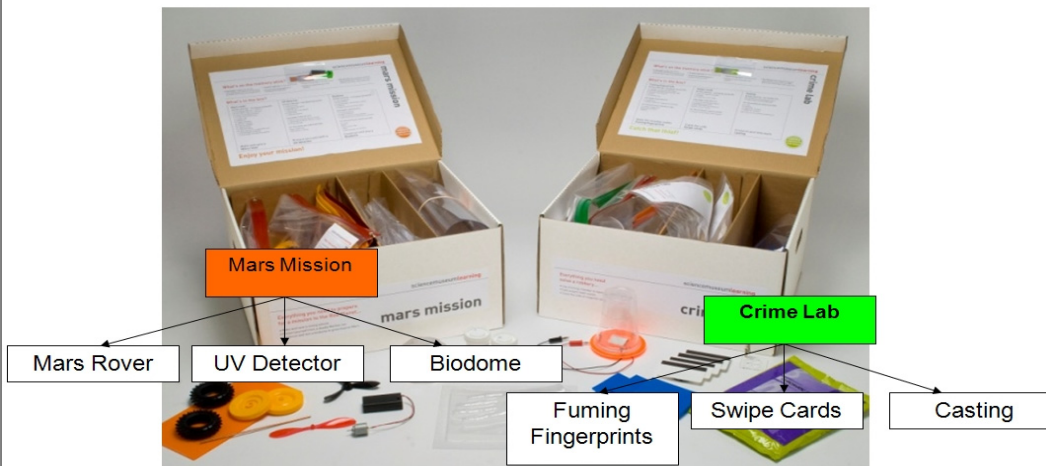


- Science Museum **free** online activities
- STEM Club boxes...



Mars Mission and Crime Lab

Equipment for 20 students (11-14 years)



Launchbox

Enrichment and inquiry-based learning activities



- To introduce energy transfer topics
- To demonstrate 'how science works'

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Developed with teachers/students



Teachers acquire the boxes in one of two ways:

- Part of a Science Museum STEM Club package
- Bought independently from the website



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Being part of the Science Museum Club...

- Training for up to 2 members of school staff
- One or more of our Learning products:
 - Launchbox
 - STEM Club Box (Crime Lab or Mars Mission)
 - News + Views and Mystery Boxes
- An end of year VIP event



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What teachers had to say...

“We just needed ideas. It’s so hard and we don’t get any time.”
Teacher (SM Clubs Training Programme)

“You can get accreditation as well.”
Teacher (Paid online)



What are teachers and students looking for?

- Wow factor
- Inquiry-based learning
- Real world science
- Range of activities – hands-on; discussion; quizzes ...
- Extension opportunities
- Accreditation
- Easy-to-understand instructions



How are schools using the boxes?

- Science or STEM Clubs
- End of term treat
- Transition/induction days
- To re-motivate class

Big incentive for students:
Feel that they are getting to do
what real scientists do



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Future ideas...

- Using STEM Ambassadors
- Science Communication workshops
- Students create events for other students e.g. discussion events; hands-on activities



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Mars Mission: UV Detector Feedback

WOW FACTOR...

“They liked the UV light, the blue and purple. They like to see something happen!”

INQUIRY...

“It’s changing the distance, which is the independent variable.”

EXTENSION...

“They should have done more extension. Get them to bring in sun creams. Are they really Factor 50? Testing clothes as well.”

REAL WORLD SCIENCE...

“The UV did get through. They would have damaged the skin. It actually was real.”

