



## Young Engineers and Science Clubs Scotland

**Report to Institute of Physics**

**October 2014**

**IOP** | Institute of Physics  
In Scotland

## Background

**The Institute of Physics has awarded SCDI a grant of £2500 each year since May 2011 towards the Lighting up the Curriculum for Excellence project.**

Lighting up the Curriculum for Excellence introduces primary pupils and their teachers to electronics in an exciting and engaging way.

Teachers are provided with a half-day hands-on workshop where they learn to solder, as well as the techniques of de-soldering and fault-finding.

Kits are supplied containing a soldering iron and all the necessary tools and safety equipment, as well as 60 individual component packs for three types of LED based circuit.

Pupils can then construct circuits and incorporate them in all sorts of imaginative projects and artwork.

To date, over 200 kits have been distributed to schools across Scotland. We have run eighteen training workshops to date, which in the past year have targeted Angus, Fife, Edinburgh and Glasgow regions. In addition we have run a number of workshops for school pupils at science fairs and a number of one-to-one training sessions.

The Institute of Physics' support has enabled us to supply schools that have previously taken part in the project with a top-up kit to enable running the project again with a further group of children.

The Institute of Physics' support has been highlighted on all materials as well as the Young Engineers and Science Clubs Scotland and Lighting up the Curriculum for Excellence websites.

## Institute of Physics Support

Sustainability is an important aspect of the programme and many of the schools with kits require additional components and/or soldering equipment to introduce the project to new groups of young people.

The Institute of Physics grant for 2013/14 has enabled additional Lighting up components and equipment worth £125 per school to be provided to the following schools across Scotland:

- Stanley Primary, Ardrossan, North Ayrshire
- Glasgow Gaelic School, Glasgow
- Sciennes Primary, Edinburgh
- St Gerardine Primary, Lossiemouth, Moray
- Charleston Academy, Inverness, Highland
- Spittal Primary, South Lanarkshire
- Tullynessle Primary, Aberdeenshire
- Garnock Academy, East Ayrshire

- Perth Academy, Perth and Kinross
- Newtonhill Primary, Aberdeenshire
- Livingston Village Primary, West Lothian
- Kintore Primary, Aberdeenshire
- St Blane's Primary, Blantyre, South Lanarkshire
- Sacred Heart Primary, Penicuik, Midlothian
- Mauricewood Primary, Penicuik, Midlothian
- Dornoch Primary, Highland
- Macdiarmid Primary, Skye, Highland
- Kingsland Primary, Peebles, Borders
- Woodlands Primary, Irvine, North Ayrshire
- St Mary's Primary, Largs, North Ayrshire

A further 20 schools were similarly given additional materials with each of the 2011/2012 and 2012/2013 grants.

## Appendix 1- Testimonials and Photos

The chance to create an electronic circuit and to use soldering irons created a buzz of excitement at our club and lots of good discussion came out of it relating it back to what we had done in exploring circuits. We are so grateful to the IOP and to the Young Engineers and Science Clubs Scotland for the generous training and equipment. We would never have been able to offer this series of club sessions without the help.

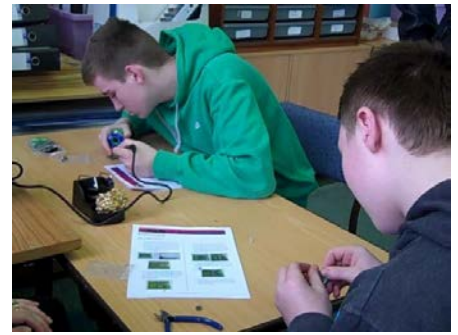
### Sciennes Primary School

Our club have demonstrated and explained the skill to others - giving them a confidence in themselves and interest in engineering and science, and inspiring themselves and others.

### Spittal Primary School

We have been using the sets every year with a composite P4-7 class when investigating circuits and energy. The tasks are fantastically engaging and the soldering is a great hit - especially with the girls!

### Tullynessle Primary School



## Appendix 2 – Young Engineers and Science Clubs Scotland Partners

### Lead Sponsors of Young Engineers and Science Clubs Scotland

Lloyd's Register Foundation  
Scottish Government  
Shell U.K. Limited  
Skills Development Scotland  
Tomorrow's Engineers

### Principal Partners of Young Engineers and Science Clubs Scotland

BAE Systems Maritime – Naval Ships  
BP  
BT Scotland  
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TAQA  
Tomorrow's Engineers  
Weir Group

### Associate Partners and Event/Project Sponsors

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Lloyd's Register EMEA  
Morrison Construction  
National Grid  
Scottish Oil Club  
Selex ES  
Total  
University of Strathclyde  
Wood Group

Many more organisations assist the programme by setting STEM Challenges and judging at our events, advising on projects, offering factory visits etc

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