

## ACTIVITY REPORT SEPTEMBER – DECEMBER 2007

### MAIN ACTIVITIES

**Engineering Education Scheme** – the Engineering Education Scheme recommenced on Tuesday 9<sup>th</sup> October with the Scheme Induction Day taking place at Queen’s University. A total of 108 AS level students from 27 teams are currently linked with companies and working on R&D projects.



**STEM Roadshow Programmes** – this year we plan to run the largest programme of science, technology and maths roadshows Sentinus has ever delivered, totalling 175 activity days and engaging at least 12,000 pupils. The total number of STEM Roadshows booked or delivered is as follows:

Programme	Delivered/Booked
Primary Science & Technology Roadshows	18
Primary Fun Maths	12
Primary Keyquest Maths Roadshows	6
Primary Robotics	18
Secondary Science & Technology Roadshows	15
GETSET Roadshows	5
Secondary Fun Maths	28
Secondary Robotics Roadshows	8
Special Schools STEM Roadshow	9
<b>Total</b>	<b>119</b>

**Special Schools Science & Technology Days** – five Special Schools STEM Roadshows were delivered in the quarter, a further 16 will be delivered in the Easter term. These programmes will be supported by trained sixth form mentors from local schools who will support special needs pupils in carrying out a number of problem solving tasks.



**RAF STEM in Action Day** – a very successful STEM in Action Day took place at RAF Aldergrove on Wednesday 3<sup>rd</sup> October. A total of 189 Year 11 pupils from seven local secondary schools took part in a series of interactive problem solving workshops and activities, supported by a number of technical staff from the RAF. The pupils also had the opportunity to visit a number of interactive displays provided by the RAF.

**Insight Into Engineering Programme** – an Insight Into Engineering Programme for boys took place from Monday 10<sup>th</sup> – Thursday 13<sup>th</sup> December involving 50 lower sixth form students from schools throughout Northern Ireland. The programme gives young people and insight into the work of the professional engineer and allows them to meet and talk to young role models already working in the profession. They spent one day at each of Queen’s University and University of Ulster and two days on placement with professional engineers.

**Employability Skills Programmes** – the total number of Employability Skills Programmes booked or delivered is as follows:

Programme	Delivered/Booked
Interview Skills	84
Career Planning	28
Personal Effectiveness	28
Business Insight	15
Learning Skills	42
<b>Total</b>	<b>197</b>

**Experiences of Work** – we will deliver a programme of 30 Experiences of Work programmes in secondary schools in the coming months. Sixteen of these programmes have already taken place with a further 10 already booked for coming weeks. These events give pupils an opportunity to hear at first hand about the career influences and experiences of young role models with a focus on science, engineering and technology sectors.

**Science & Engineering Ambassadors** The total number of Science & Engineering Ambassadors registered now stands at 813, these Ambassadors support a wide range of Sentinus programmes and engage with young people in a number of different types of activities. Northern Ireland has one of the highest levels of registration for this programme.

**STEM Activity Day at Bangor Academy** – a STEM Activity Day took place at Bangor Academy on Tuesday 4<sup>th</sup> December. A total of 260 Year 10 pupils from Bangor Academy, St Columbanus' College and Glenlola Collegiate took part in a series of Fun Maths activities, problem solving challenges and computer based maths and science challenges.



**Industry Challenge** – the industry challenge, involving work on renewable technologies and an energy audit for Key Stage 3 pupils, will be rolled out to 30 post primary schools this year. Linking with a local industry pupils will embark on a six week project based on an industrial visit to their host industry. The activity will be supported by Science & Engineering Ambassadors from the host company. Currently 22 schools have committed to the programme.

**Specialist Schools** – we are continuing to deliver co-ordinated programmes of activity to Specialist Schools in the areas of Science, ICT and Maths & Computing. These activities are designed to support them in delivering their remit as Specialist Schools and include delivery of a range of STEM roadshows, robotics Roadshows, summer schools, bursary placements and residential workshops.

## COMING ACTIVITIES

**EES Residential Workshop** – the Residential Workshop will take place at the University of Ulster and Queens University from 17<sup>th</sup> – 19<sup>th</sup> December and will provide the teams with an opportunity to access expertise and equipment not available within their schools or link industries. By the end of the week they should have advanced the development of their projects significantly.

**GETSET Insight Programme** – a GETSET Insight Into Engineering Programme for girls will take place from Monday 25<sup>th</sup> – Thursday 28<sup>th</sup> February involving 50 lower sixth form girls. The aim of the programme is to give girls an insight into the work of the professional engineer and allow them to meet and talk to young role models already working in the profession.

**National Science Week** – as the Northern Ireland Regional Office of the BA, Sentinus is responsible for the co-ordination of the programme of activity throughout the Province for Science Week (7<sup>th</sup> – 16<sup>th</sup> March). Sentinus will also be running a number of events during the week.

**Smallpeice Trust Residential Workshops** – we will once again be sending a number of students to participate in these week long residential which give students an insight into a range of engineering disciplines and engage them in hands on projects. They will also have the opportunity to see some cutting edge engineering research projects at UK universities.

