

The Specialist @ Nunthorpe

Issue No. 14 November 2011

Editorial: We've had our 'trick or treats' and set off all our fireworks and it's now the run up to Christmas. With presents on your mind you can't do any better than get along to the Christmas Fair in the main school hall on Wednesday 16 November for that 'different' gift for friends and family. At the same time you'll be raising funds for your House charities so it's 'win win'!

At the end of July there was a celebration event at Laurence Jackson School to recognise the work that LEGI (Local Enterprise Growth Initiative) has done with schools and small businesses over the past three years throughout the borough of Redcar and Cleveland. All the schools in the area were judged by independent businesses and the sponsor of the "Most Enterprising Secondary School" was Innovative Enterprise and they selected Nunthorpe School as the winners. Commenting on the award they said:

"Nunthorpe School we feel is the most enterprising secondary school as they demonstrate a great variety of enterprising projects both within the school setting and internationally. The majority of the projects and businesses within the school all have a real purpose and all contribute to a great cause"

The Enterprise ethos is well established in our school and we are busy preparing for Global Entrepreneurship Week, November 14 –18, when there will be various events taking place with the Christmas Fair being the centre piece.



Mrs Blacklock (centre) receiving the award

Global Entrepreneurship Week 2011

The week beginning Monday 14 November is Global Entrepreneurship Week. The centre piece of the activities will be the Christmas Fair held on Wednesday 16 November 2011 in the Main School Hall where students will have stalls selling goods to raise funds for their House Charities.

A venture by some of our Business and Art students will see Christmas gift wrapping paper available on sale that day. The students and staff have put a successful bid together for funding from the Enterprise Team to get them started with this business. It is a whole school sustainable business as each year group will be given the opportunity produce designs for various seasons and events throughout the year.

Social Enterprise is continuing again this year in collaboration with Coast and Country and 8 of our current Year 10 students are working on a project in their own time to create a Sensory Garden at Upsall Hall. This is a continuation of other projects that have been completed by our students at Upsall Hall over the last two years. In 2009 -10 students designed and help build a bird-hide and in 2010 -11 a footpath was designed and built leading to the pond in the Hall grounds. The current students have met with Hall staff and had a site visit and are now costing the project and setting dates for the start of works. We wish them well and will keep you informed as the project progresses.

Gardening @ DANS

The gardening year is almost over with just a few tidying up jobs to do before the winter arrives. After what seemed to be an endless winter in 2010 resulting in a late start to the growing season, we managed to grow potatoes, tomatoes, beans, onions, carrots and pumpkins. In the spring we were assisted by George and Jonathon from Texas, who came into school and helped us to plant the pumpkins in the vegetable beds at the back of TSFE. Their act of kindness has resulted in a bumper crop of pumpkins: the proceeds from the sale of these will be used to purchase much needed gardening equipment for our gardening club.

The gardening club also assisted with the revamp of the Remembrance Garden near Science. Unfortunately, this area of peace and contemplation suffered during the severe winter of 2010 and many tender plants, such as the Acer tree and tree ferns were lost to the frost and snow. Brambles rampantly over took the garden and it was in desperate need of a tidy and replant. The gardening team have now



cleared the area of weeds and brambles and have restored the Remembrance Garden back to being once more a place of serenity.



Nunthorpe in Bloom took place again this summer and the gardening team were invited to assist with the planting of summer bedding plants in the planters around Nunthorpe Railway Station. Other gardening projects included weeding the Technology quad and the planting of summer colour - mini sunflowers, marigolds, and

nasturtiums near the Food Technology block.

As you can see we have had a busy summer with an even busier autumn ahead to prepare for the winter. Weather permitting - jobs include digging and weeding the vegetable beds, clearing flower beds and planting winter pansies and daffodil bulbs so that we have colour in the spring.

Thank you to the students who have helped with gardening and I look forward to seeing you all in the spring. Miss L Dean



Planters for Welcome to Nunthorpe

Gardening @ DANS is just one of the small enterprise businesses that students are involved in at Nunthorpe 11-18 School.

Science News

NETPark visit

Earlier this year (Specialist @ Nunthorpe edition 13), 12 of our students were involved in a Master Class on the subject of SMART Materials delivered by Mr Ben Haddon, Engineering Design Trust, who gave an insight into the ongoing research and development in top companies around the globe. On the last day of the summer term the students visited NETPark. (North East Technologies Business Park), who offer the ideal environment for science, engineering and technology organisations to work collaboratively, develop new ideas and commercialise cutting edge technologies. The students participated in activities using SMART Materials presented by Mr Ben Haddon and Dr Lorraine Coghill, Durham University. At the start of the new term in September we received the following letter from Dr Coghill:

“Many thanks to you and your students for being so fantastic during your recent visit to NETPark. We were really impressed with the group’s enthusiasm, creative ideas and grasping of the concepts – especially in such a short period of time. Please pass on our congratulations to them all for doing so well.

We hope that they found the session useful and enjoyable, especially as it was their last day of school. We hope that they did well in their exams.

We would be happy to be involved in future activities with your school and do feel free to get in touch.

We look forward to meeting your students again as future innovators.”

Welcome praise for the students from a respected authority in her field!

Engineering Education Scheme

Friday 14 October 2011, saw the launch of the 2011-2012 Engineering Education Scheme hosted by Newcastle University.

The Engineering Education scheme is one of several schemes run by the Education Development Trust, a charity, who provide Yr 12 students with the opportunity to gain valuable work experience in the fields of science, engineering and technology. Participants are regarded highly by employers and Universities for their commitment, self discipline and the skills they develop.

The sixth form team this year comprises of Amy Jeal, Josh Rae, Matthew Rose, Tom Elliot, Tom McMahon and Ryan Johnson. The event took place in the Armstrong building at Newcastle University and consisted of two team building activities. The morning activity was to construct a paper cannon with which to launch paper “frogs”. The afternoon activity was to construct a bridge out of paper capable of supporting a mass of 250 grammes.

After lunch the students were introduced to their projects engineer, Peter Fenwick from SABIC and their mentor, Alan Dixon. Following the bridge building exercise the team got down to the business of their long term project, namely to devise a method to automate the dilution of Sodium Hydroxide from a 45% solution, which SABIC’s Wilton plant buys, to a 4% solution which is necessary for the ‘scrubbers’. We wish them well with their project and will report next year on how they have done.

Look out for:

More exciting activities for students to become involved in e.g. Master Classes, visits, events at the school, can be found on our Website so please check it out regularly at www.nunthorpe.co.uk

PARK VIEW SCHOOL

Partner School visit



On 12 October 2011, 15 of our Gifted and Talented science students visited one of our partner schools, Park View School, County Durham to take part in two challenging science activities. In turn, Park View will visit Nunthorpe on 16 November 2011. The morning activity was Physics based and the photo on the left shows two of our students working with Park View students on masses.

The afternoon activity had the students performing titrations (see photo on right) which requires them to concentrate as much on manual skills as academic ones!

Here's a report from Year 10 student, Alex Currie, who attended the visit:

"When we went to Park View School we noticed that the entrance sign was in two languages, English and Japanese! This is to highlight the school's language specialism.

We were led through the school to a conference room in a huge library where we met the Park View teachers. After being split into groups made up of students from both schools we were given our task which was to calculate the spring constant (how much mass it takes to stretch a spring by a certain amount) using numerous formulae. We had 40 minutes to plan and carry out the experiment including the method, risk assessments and a results table and we were given a range of equipment to do the experiment. At break we couldn't help but laugh at the "Eat, Drink, Mellow" sign in the cafe, which was excellent as it was multinational with food from a range of countries around the world. When we went back we had to get our results and then one of the Park View teachers did the experiment to show the correct result. After this we went to lunch which was a buffet that included donuts, corned beef pie and sandwiches! In the afternoon it was chemistry and we were asked how to work out the concentration of an unknown alkali in moles. This led to us doing an experiment on titration. After some cheesy music we got a minibus home!"

