TRUST

October Issue 5 www.ntlearningtrust.org.uk @NTLearningtrust



Improving education and life chances for children and young people in North Tyneside

North Tyneside Learning Trust



Welcome to the autumn term edition of TRUST. This issue contains a special STEM (Science, Technology, Engineering and Maths) supplement updating you on all the latest STEM developments and achievements. Creating a Trust wide STEM strategy that reaches all ages and phases of education has been a key priority for the Trust over the last few months and plans to accelerate progress are well underway. Going forward, the supplement also contains a number of opportunities for Trust members to get involved in to really make a difference in enhancing teaching and learning in STEM subjects. I hope you enjoy reading about this and much more in issue 5 of TRUST.

Kehri Ellis, Chief Executive of North Tyneside Learning Trust

Welcome to Monkseaton High School

The Trust is delighted to welcome our tenth secondary school, Monkseaton High School, into the Trust bringing our total number of schools supported by the Trust to 40. Monkseaton High School officially joined on the 1st October 2013 and a formal welcome event offering the Headteacher and Chair of Governors the opportunity to meet directors and key staff will be hosted in November.

The Trust is also currently in discussions with a further 10 primary and first schools who are considering membership. This is fantastic news as the more schools we have working together, the greater our ability to improve education and life chances for children and young people through collaboration with our employer and higher/further education partners. A new round of consultations involving 5 schools will begin after the October half term.

Wireless & ICT Hardware Grant Update

The £400k match funded grant programmes for wireless installation and ICT hardware have been very popular amongst Trust schools with almost all schools submitting application forms. After ensuring 100% full wireless coverage across the whole school, Simon Ripley, Headteacher at Woodlawn School, has used some of the grant funding to buy every post-16 pupil a Chromebook and tweeted us a picture (right). Applications are still welcome from schools who have not yet applied. Please contact

chloe.mortimer@ntlp.org .uk for an updated application form.



Apprenticeship Bursaries for Trust Schools

The hugely successful Trust Apprenticeship Bursary Scheme has created over 50 apprenticeships so far and the Trust is making available a further 20 apprenticeship bursaries for 2013/14. The apprenticeships are open to 16-18 year old Trust school leavers. Employees receive a bursary of



Sarah Fenwick, Business Administration Apprentice at Benton Dene School

 \pounds 3,550 and they will be made available to Trust schools as employers in the first instance.

Last year a number of Trust schools took on an apprentice in areas such as teaching and learning, business administration and ICT. Julie Royle from Benton Dene School employed Sarah Fenwick as a Business Administration Apprentice and said "**The scheme has offered the school a fresh and youthful outlook on the working environment. Sarah has fitted in so well and has given the staff the opportunity to share their skills.**" <u>To view our</u> Hall of Fame please click here.

If you are a school or employer interested in the Bursary Fund please contact Claire Dunn for further information at claire.dunn@northtyneside.gov.uk or 0191 643 6407. <u>Further details can be found on our flyer</u> by clicking here.

Outstanding Teaching Programme 2 for 1 Offer

Trust is delighted its The to announce support for the continued successful Outstanding Teaching Programme. The OTP is a nationally accredited programme designed for consistently good teachers who have the ability to be regularly outstanding. The programme is delivered in 9 modules at a cost of £600 per teacher. Last year the Trust supported 32 teachers through the programme from 16 schools. The Trust 2 for 1 offer pays the course fees for one Teacher when a Trust

school registers two members of staff on the course. Sending two teachers per school allows staff to work together throughout and after the programme to provide support and training for other staff to improve the quality of teaching and learning right across the whole school. For more information view the OTP flyer here. To book places please contact Lisa Dawson at WBHS by emailing lisa.dawson@ntlp.org.uk.

Bett Show 2014 – ExCel, London

Bett is the global meeting place for the education technology community, bringing together 35,000 educators and learning professionals.

The Bett Show 2014 will take place on 22-25th January 2014. Delegates receive a choice of free CPD, accredited seminars and workshops, networking and a chance to see the latest technology and innovative solutions to shape and improve the way people learn in the classroom. More information and registration for the conference can be completed on the following website <u>www.bettshow.com.</u>

The event takes place in London and the Trust has secured a fantastic deal with a nearby Premier Inn (20m away from the venue on the DLR line) for the night of the 24th January. For just £127 two staff can enjoy dinner, bed and breakfast in a twin room. For more information and to book a room please contact Chloe Mortimer before Friday 15th November 2013 by emailing chloe.mortimer@ntlp.org.uk.

Digital Mysteries

Digital Mysteries is a collaborative learning platform designed to promote higher level thinking and effective collaboration. Reflective Thinking, the creators of Digital Mysteries, are offering Trust schools a FREE school licence for one full term. Digital Mysteries present students with up to 30 slips of information, an open question and often additional closed questions, which form a foundation for discussion and learning. The special offer includes four hours of free training and on-site support for the first class session, if required.

A number of Trust schools have already been introduced to Digital Mysteries and Candy Mellor, teacher at Marden High, said **'1 can see Digital Mysteries being used in a cross curricula way and would work in all areas of education. It creates discussion and compromise, group work and independent thinking as well as high level thinking:**

Skills to Shine Summer School

Students from Trust schools, Burnside Business and Enterprise College Longbenton and Community College, descended on the Discovery Museum in Newcastle on the 25 September for the final showcase of the Skills to Shine Summer School, a programme funded by the DfE. The students presented their creative and inspiring business ideas in response to their Social Enterprise Challenge to a packed audience and a panel of enterprising judges.



Students from Longbenton Community College enjoying the Summer School

making a student analyse the aspects that are needed to come to a conclusion."

To find out more please click here to view the flyer. To make an enquiry contact the team at Digital Mysteries info@reflectivethinking.com or 0191 222 3695.



Two students from Marden High School working on the PC version of Digital Mysteries

Skills to Shine aims to engage young people in real, relevant and inspiring educational activities. giving them the knowledge, experience and skills to shine in their chosen career path, whether that be employment, self-employment or further education. 100% of the students who attended the course rated the programme as excellent or good and almost all the students felt that participating in the Summer School gave them a better understanding and knowledge of their chosen career paths. One teacher from Longbenton Community College said "Students developed the confidence to develop ideas and present them, which are skills that can be utilised across the curriculum. Learning and developing ideas have been manipulated into a creative and exciting way through Skills to Shine." To read the Trust school case studies visit our website. To find out more about Skills to Shine Summer Schools and their Enterprise Project you can visit their website at www.skillstoshine.co.uk.

STEM Careers Strategy gets a £12,000 boost!

The Trust has been working in partnership with the <u>National Science Learning Centre</u> to develop a STEM Careers Strategy. The NSLC has awarded the Trust two ENTHUSE Cluster Awards totalling £12,000 to support clusters of Trust schools working together to introduce more enquiry based approaches to science learning, raise aspirations and achievement in science and improve methods of assessment for learning across all ages and phases. Over 70 ENTHUSE Cluster applications were submitted nationally and the Trust is delighted to have received two of

Primary Engineer Award Success



Year 2 and Year 6 students from Carville Primary School, Benton Dene School,

Appletree Gardens First School and Monkseaton Middle School participated in the Primary Engineer 2012/13. All the schools performed exceptionally well though special congratulations aoes the to Aces'. 'Appletree two students from Appletree Gardens First School, who won the Primary Engineer North East Final Award in July. Iris Rawsthorne and Radia Islam, designed and made a model car. Quick Hydraulics Limited, a North Shields only fifteen awards granted. Headteachers/ Senior Leaders, Science Leads and STEM Governors will be invited to the official launch of the Trust STEM Careers Strategy on Thursday 14th November 2013. The Trust's STEM Careers Strategy supports a number of the Trust's priorities including: increasing participation and attainment in STEM. increasing progression to further and higher education, creating education to employment pathways and ultimately, to support the transformation of North Tyneside into a high wage, high skill economy.

based engineering company, sponsored the Trust school. The managing director of Quick Hydraulics Ltd, Andrew Esson, said "1 was delighted to see Appletree Gardens winning the Award." Andrew is also a Trust Governor for Monkseaton Middle School. The Trust is delighted by the success of Appletree Gardens First School and is hoping we can build on our success this coming year. A further 9 schools supported by the Trust will be participating in Primary Engineer 2013/14 namely King Edward Primary, Amberley Primary, Hadrian Park Primary, Western Primary, Redesdale Primary, Stephenson Memorial Primary School. Grasmere Academy and Denbigh Primary.

Enquiry Based Learning in Science Course

Trust school science leads/teachers are invited to attend a bespoke CPD course on Enquiry Based Learning at the National Science Learning Centre in York. The course has been developed specifically for Trust schools as part of the Trust Science Strategy that seeks to introduce more enquiry based opportunities to science learning in Trust schools. The Trust has been working with Mark Langley at the NSLC to create a programme that will help liberate and empower teachers of all phases to deliver quality enquiry based learning opportunities in science. Teachers who attend the course will be encouraged to share the skills and knowledge learned with others. The course will take place on Monday 11th November 2013 from 9:30 am until 3:00 pm. An ENTHUSE Award Bursary will be available to cover course costs and contribute towards cover and transport. Transport will be organised by the Trust. To register your interest contact chloe.mortimer@ntlp.org.uk.

National Science Learning Centre FREE CPD Offer

The Trust is keen to promote an outstanding offer from The NSLC of FREE, high quality CPD for STEM teachers, teaching assistants and technicians working with pupils aged 5-19. Each term the NSLC deliver a comprehensive programme of high quality professional development courses which are proven to make a difference in classroom practice and improvements in student's learning. A broad range of courses are on offer including, for example;

- Leading Science in the Outdoor Classroom
- Achieving Excellence in Primary Science
- Physics for non-Specialists
- Skills for New Technicians
- Inspiring Post 16 Chemistry

Courses are held at the state-of-the-art NSLC facility situated on the University of York's campus. Most CPD courses are eligible for an

ENTHUSE Award Bursary which **covers course fees** plus a contribution towards other costs such as transport and supply cover. A simple online form is all that is needed to apply for the bursary. To find out more please visit the NSLC's website at <u>www.sciencelearningcentres.org.uk</u>.

The Trust is keen for all schools to benefit from the CPD opportunities available through the NSLC and we are encouraging all schools to take advantage of the ENTHUSE Award Bursary on offer as part of our STEM Careers Strategy. If you are planning to attend a course please inform our Partnership Coordinator, emailing Chloe Mortimer. by chloe.mortimer@ntlp.org.uk. Chloe will coordinate transport wherever possible when more than one Trust teacher is attending a course to help reduce costs.

Maths Leadership Development Course



Towards the end of the last term, fifteen primary and middle school teachers from Trust schools began a Trust sponsored Maths Leadership Development Course led by Debbie Morgan from the <u>NCETM (National</u> <u>Centre for the Excellence of Teaching in</u> <u>Mathematics</u>). Staff on the programme have already picked up lots of new mathematical ideas and approaches to share based on

cutting edge maths research. The Trust's Primary Maths Lead, Wendy Mitcheson. attended the course and said "it was a fantastic opportunity for teachers to network and learn from each other." Teachers will be making small mathematical changes in schools and will be meeting up in December to discuss personal development and to provide peer to peer support. Teachers who attended the course will be working closely in partnership with a chosen school so that other Trust schools will also benefit from the programme. The 15 Trust Maths leads will continue to come together for training and professional development over the next 6 months to complete the Maths Leadership Development programme. Having 15 NCETM trained Maths Leads employed across Trust schools will serve to strengthen capacity cross this important area of the curriculum.

International Paints Summer Science Project

During the summer term a very successful extended project with 30 year 7 students from Monkseaton Middle School was delivered in collaboration with International Paint and led by Andy Gray, Trust Science Lead and currently Acting Head of Science at Whitley Bay High School. The project was delivered over 6 weeks starting with an introduction offering an insight into engineering and careers, followed by practical science experiments under the guidance of scientists from International Paint. Students coated paint surfaces with different substances to test the rate of corrosion. Students could experiment with whatever they wanted including coffee, Vaseline, olive oil and even shaving foam! Student Helana Wheatley said "I loved experimenting with different substances and covering the tiles to see if they would stay the same or change." After analysis of the students delivered their results а presentation in the final week. The students

Oceans of Opportunity Careers Fair

Newcastle University's School of Marine Science and Technology will be hosting their annual careers fair on Friday 8th November. The careers fair will be attended by a wide range of high profile companies and employers with many challenging and exciting careers showcased. An estimated 500-600 pupils aged 15-18 years are expected to attend. There will be a range of stimulating, interactive activities that bring science learning to life, opportunities to participate in an engaging debate and to find out more about the fantastic careers and courses on offer in science.

The Trust is keen to encourage Trust school students to attend and can offer support with

discovered some interesting leads on water soluble coatings which the technical team at International Paints are now going to look at developing. International Paints believe that the free thinking which middle school students provided is very difficult to replicate in their research team. International Paints plan to keep in touch with the team to provide ongoing support. The Trust is now working with <u>AkzoNobel</u> to see if more extended science projects can be delivered in Trust schools.

The project tested the ideas of Ken Mannion from Sheffield Hallam University, whose research showed a significant increase in the likelihood of students to want to become scientists if they took part in an extended project, rather than short term interventions. At the start of the project there were 4 students who had an interest in a career in science or engineering, by the end this number had risen to 11.



transport to and from the event. A number of Trust schools have already booked including; Monkseaton High School, Seaton Burn College and Whitley Bay High School. <u>To book a place</u> <u>please download a booking form from here</u> and send it to Annie Russell at <u>annie.russell@ncl.ac.uk</u>. Annie will liaise with our Partnership Coordinator, Chloe Mortimer, to book transport.



6th Formers deliver Primary School Science

As part of the Trust STEM Strategy a number of Trust schools have been working together in clusters to test new approaches to science learning. Whitley Bay High School and Monkhouse Primary School have been working together to run a 5 week program involving 6th form science students delivering science experiments in primary school to enthuse students about science. Year 5 primary students at Monkhouse Primary School participated in activities for 4 weeks then presented their discoveries to their parents in the 5th week.

The programme was very successful and the primary teachers were very keen to have the expertise and enthusiasm that the A Level Biology, Chemistry and Physics students provided. The areas were Biology (how animals work, including dissection), Chemistry (doing experiments such as burning, acids and alkalis, explosions) and Physics (rockets and propulsion). The 6th form students planned and delivered the activities and one of them now intends to become а primarv school teacher. Laura Baggett, Headteacher at Monkhouse Primary School said "The sixth formers were a credit to WBHS and staff. We have thoroughly enjoyed their input and our children's science experiences have been amazing."

The Trust is keen to build upon the success of this project further by extending it to more Trust schools using other Trust 6th forms. Andy Gray, Acting Head of Science at WBHS, assisted the 6th formers with the project and said "1 have found the projects very rewarding and I would like to thank Rachel Mays and the management team at WBHS for their support and the science staff at WBHS who have helped cover the odd lesson where I have been of site." To contact Andy about the project please email him at andy.gray@ntlp.org.uk.

STEM Wonder Challenge

The Trust has been working with The Construction Industry Council, Owen Pugh, the Institution of Civil Engineers and other partners to offer schools the opportunity to take part in Wonder Challenge 2014. The challenge offers students the opportunity to develop key skills including communication, presentation, team building and enterprise skills.

The 'Wonder Town Challenge' aims to raise awareness among young people of the opportunities available at all levels within the construction and engineering industries. Teams of students work together to form a mini construction company and with the help of construction and engineering mentors they produce a 'Wonder Town Master Plan.' The challenge is open to pupils in Years 9 or 10 working in teams of up to 8 students. Schools can enter as many teams as they wish therefore making the project an ideal class or, for the more ambitious, year group project! The best teams will go forward to represent their school at the Wonder Challenge Grand Final. The project is open to all students and industry supporters are particularly keen to see that the project challenges gender stereotypes. Female role models will be integral to the team of industry consultants available to support students.

For more details please download the project brief here. To register please complete registration form here. The form must be emailed to <u>pauline.vipond@gmail.com</u> by the end of October 2013.

Think Physics

The Trust is working in partnership with Northumbria University on a £1.3 million bid to HEFCE for a 3 year project called 'Think Physics'. The project aims to increase participation in physics, particularly amongst girls, by offering a range of physics activities that will keep children involved and excited about the subject as they journey through the education system, from pre-school to university. The project aims to provide a blueprint for similar systems that could be set up across the UK.

'Think Physics' will work with a number of different stakeholders including children; schools; colleges; universities; employers; local authorities; parents; museums and science centres; and partners in the wider community. A Think Physics Centre will be created at Northumbria University and a Think Physics project team will be employed to run the central resource centre and deliver outreach activities



in schools and the wider community. The project will also make use of a mobile physics laboratory and educational resources available from the resource centre. The project will place a heavy emphasis on engaging children from an early age, with a focus on science generally in early years, progressing through to a more specific focus on physics at secondary school.

The project is also looking to target children's wider support network i.e. teachers, parents and the wider community. Its focus will be upon educating the wider community about the wide range of career opportunities physics can open up for children and young people.

Kehri Ellis said "The Trust is delighted to be named as a formal partner in the Think **'cradle** Physics bid. The to career' approach with interventions at every age and phase of education (Pre School, Primary, Secondary, and University) is particularly exciting. All too often projects nature focus of this on secondary education and more specifically 14+, it is refreshing to see interventions begin in pre -school." Updates on this exciting project will be provided in future editions of TRUST.

Step into STEM – Funding Update

In the July issue of TRUST readers were introduced to 'Step Forward with STEM', a 5 year programme of hands-on careers focused activities designed to raise awareness of engineering as an attractive career option and inspire young people in Trust schools to consider a career in engineering. Since then a series of funding applications were made to companies and Trusts to fund the proposals and a number of grants have been secured. The Trust would like to thank the generous support of the Ballinger Charitable Trust for their grant award of £31,280 and the R. W. Mann Trust for their award of £1,000. The Trust is still awaiting the outcome of other submitted funding applications. The project will be delivered in partnership with The Smallpeice Trust, Arkwright Scholarships Trust, Engineering Development Trust and STEMNET, four of the largest engineering education charities in the country. The Trust is hoping to launch the first phase of the project in secondary schools in January 2014.

Children in the Driving Seat of Future Vehicle Design - Competition

Newcastle University has launched an exciting competition alongside Newcastle Science City as part of the British Science Festival 2013. The competition calls for children aged 6-16 to use their science skills to design a low carbon vehicle. Entrants will have the chance to win some great prizes including a visit to the only vehicle test track in the North of England, a tour of Nissan to see how electric vehicles are made, and a £1,000 cash prize for their school.

Professor Chris Brink, Vice-Chancellor at Newcastle University said "Our researchers and students are working at the cuttingedge of science to develop new ways for people to move about more sustainably. We hope this competition will encourage and inspire a next generation of scientists to think about the kinds of transport we could all be using in the future." Karen Marshall, Trust Governor and Education, Skills & Engagement Manager at Newcastle Science City added "What we wanted to do with this competition was give youngsters the opportunity to get involved too, harnessing their creativity whilst using their STEM skills at the same time!"

The competition closes 14 February 2014. Entrants should submit their design on a poster with supporting information depending on the relevant Key Stage. A full entry pack can be downloaded online at <u>www.newcastlesciencecity.com/</u> <u>schoolscompetition</u>.

Shortlisted entrants will be invited to present their ideas at an exclusive event during National Science and Engineering Week in March 2014, where a panel of experts including industry partners will judge the designs. For more information contact Fran Ratliff on 0191 232 5690.



Career Talks by Northern Architecture



Trust has The been working Northern with Architecture, who have identified a lack of provision architectural/ in built environment advice careers within schools. and are currently

offering FREE careers sessions to KS3, 4 and Sixth Form students in Trust schools. The sessions will take the form of short presentations, perhaps prior to work experience week or as part of enrichment activities aiming to introduce the various pathways to a career in the built environment sector and offering an insight into roles as diverse as surveying, construction, engineering, heritage and spatial design. Northern Architecture also supported Newcastle University to deliver a workshop at the Big Bang event which took place in July this year. The image to the left is taken from this workshop and gives a flavour of the 'Shelter' workshops they deliver with schools. You can view their Education Services brochure here. For further details and to book a career talk please contact Sara Cooper at Northern Architecture on sarac@northernarchitecture.com.

Primary Maths Lead Update



The Trust's Primary Maths Lead, Wendy Mitcheson, is based at the Langdale Centre and is available to support Key Stage 1 & 2 teaching and learning in maths. Wendy has supported 16 Trust schools since starting her role and has recently coordinated a Maths Leadership Development Course for fifteen primary and middle school teachers (see the STEM supplement for further details). Wendy welcomes contact from any Trust school who would like support with primary maths. To contact Wendy call 0191 643 8535 or <u>wendy.mitcheson@ntlp.org.uk</u>. You can also follow Wendy on Twitter (@WendyMitcheson) where she regularly tweets about her work.

SEN Transition Worker Update

The Trust's SEN Transition Worker, Kerry Davison, has supported over 120 young people with Special Educational Needs across North Tyneside. Kerry works in partnership with families, school and colleges, Connexions personal advisors, employers and social care colleagues to develop individually tailored sustainable support. Last year support included:

- Increasing the range and number of Work Placement opportunities

- Helping individuals achieve their Enterprise Award

Primary English Leads Update



Over the last few weeks Colleen Stephenson has been working in Wallsend Jubilee Primary School by supporting and sharing expertise of the Read Write Inc. phonetics

programme. Support by Colleen has included delivering a modelled session, going on a learning walk with staff, organising resources, creating spelling lists and helping the school to produce a brochure for parents and a letter explaining the new programme.

Deborah Hughes is currently supporting Rockcliffe First School, where she has been involved in setting up two role play areas for children in Year 1. The role play areas link into class topics helping to develop the children's Job Days to raise student's aspirations from an early age

- Work Skills Days whereby students have a taster in four areas of work

This year Kerry aims to work in partnership with other agencies and to continue to identify and generate opportunities for young people to support them to achieve their goals and to increase their independence.

language,

communication and social skills. Deborah said "the children and I have had a lovely time making and learning through



play. I have also planned ten weeks of 'talk for homework' sheets for Year 1 which is something new to the children. I am currently in the reception class working on small group language activities."

Our Primary English Leads are available to support primary schools with intervention, reading and phonics. If your school would like to access this support please contact Gill Kemp <u>gill.kemp@northtyneside.gov.uk</u>.

Trust Governors

We would like to welcome our new Trust Governors:

- Mouad Chemaou Simon French James Lockey Karen Marshall Joe McMillan Wendy Mitcheson Michael Rickwood
- Procter & Gamble HMRC Director Zulu Sports Newcastle Science City Capita Symonds Primary Maths Lead Speech Genius
- Hazlewood Primary School Stephenson Memorial Primary School Hadrian Park Primary School Burnside Business College Carville Primary School Stephenson Memorial Primary School Burnside Business & Enterprise College

The Trust hosted its first Trust Governor Network event on Thursday 10th October. The event provided a valuable opportunity for Trust Governors to share knowledge and experience, provide peer support and learn about recent work of the Trust. The Trust is keen to offer regular opportunities for governors to network and are collecting views of Trust Governors to inform how the Trust can best support Trust Governors in their roles in the future.



Trust Governors at the Network Event

Upcoming Events

Annual Members Meeting

Thursday 17th October 2013 4:00pm – 5:30pm Shasun Pharma Solutions, Dudley Target Audience: *Headteachers, Chairs of Governors, Trust Governors, Employer Partners,*

Trust Staff

Enquiry Based Learning Course

Monday 11th November 2013 9:30am – 3:30pm National Science Learning Centre, York Target Audience: **School Science Leads**

STEM Careers Strategy Launch

Thursday 14th November 2013 4:15pm – 6:00pm Venue: TBC

Target Audience: Headteachers/Senior Leaders, School Science Leads, Governors with STEM responsibilities

Contact Us

Thank you for your valuable feedback on the last newsletter, your comments, suggestions and contributions are always welcome. If you have...

A news story, information item or announcement to share

Comments on this edition of TRUST

Suggestions for future editions

Please contact our Partnership Coordinator, Chloe Mortimer, on chloe.mortimer@ntlp.org.uk

