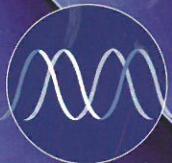


ISSUE 6 // SEPTEMBER 2008



Engineering



Non Sibi Sed Altis
Aiming at Excellence

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TRANS-FORM

THE ENGINEERING NEWSLETTER
FOR BALSHAW'S C.E. HIGH SCHOOL

I cannot believe that I am writing the Editorial for the sixth edition of Transform.

When we embarked upon the magazine we did not envisage the magnitude of its success. I asked that you give us your views on the magazine and we were delighted when a representative of the Specialist Schools and Academies Trust, Chris Smith, sent us an email stating that it was one of the best magazines produced by a school, and asking us to allow them to put back copies on to their national website.

Thanks to our graphic designer – Jon Bradley – our sponsors Runshaw and St Andrew's we continue to be able to maintain and improve upon this magazine.

We hope you continue to find it a first class magazine and we welcome your contributions.

Yours sincerely

J M Venn, Headteacher

A JOURNEY OF DISCOVERY

Year 11 pupils head to Paris

■ WHERE CAN YOU GO THAT BRINGS SCIENCE, MATHS AND TECHNOLOGY

altogether under one roof and have fun, learning as you go. Year 11 did just this at the Cité des Sciences and de l'Industrie in Paris. 60 of us started off in the Planetarium where, through the aid of high resolution projection equipment we were taken on a thrilling journey of discovery to the outer reaches of the universe. We travelled from planet to planet, explored the solar system, observed the stars in our galaxy as well as learning the history of lunar travel.

From then we explored some of what the museum has to offer. We went from Automobiles which mould our environment and pioneers production methods to Zany light and optical illusions. We learned about aeronautics from the life size Mirage IV, the first French fighter aircraft designed to carry nuclear bombs. Do you know what our energy future is? what and how our energy is produced? Reinforcement of how important Maths is, was seen as it is essential for comprehending movement, calculating probability or modelling physical phenomena in an easy fashion.

You are reminded that you are in France by making the Mona Lisa talk with your voice, or be in a French commercial. Year 11 had taken thousands of photos on their trip but here they could explore the world of images with a virtual camera. We even met Dolly the sheep.

Science came to the fore when we marvelled at the Man and the Genes exhibition which goes beyond the debate of bioethics, looking at the evolution of the species and reproduction. There is something for everyone that clearly illustrates the diversity of today's innovations, multi-focal lenses, carbon-carbon, innovative techniques in crafts and new information systems for railway stations.

Yes we were on a school trip, in holiday time but this visit together with the Louvre and seminars in Science and French all prove that education is exciting especially when learning with friends.



NATIONAL WATER DAY

Visiting lecturer speaks to Years 10 & 11



■ ON 20 MARCH DR SURESH NEZARATNAM, THE SENIOR LECTURER IN ENVIRONMENTAL

Engineering came into school to speak to the whole of Years 10 & 11 as it was National Water Day. Suresh has worked in the environmental sector since 1980. He worked at the Kuwait Institute for Scientific Research leading a team working on the treatment and disposal of Petrochemical wastes. He has worked on the disposal of oil production waste

in Scotland and also on the enforcement of waste regulations in Oman. At the Open University he runs a course on pollution control, covering wastes, water noise and air. He told us about how we can save water, by a meter, in the bathroom and toilet and in the kitchen. How we can dispose of our waste, and be more efficient in the garden. There was a good power-point presentation to illustrate it and Dr Nezaratnam ended his presentation with an exciting water rocket experiment.

We would like to thank the Institute of Civil Engineering for sponsoring this event; every pupil received a goody bag with Engineering related goodies from Universities across the County – let's hope we are inspiring the Engineers of the future here at Balshaw's.

HELLO, GOODBYE

■ It is with sadness that we said farewell to Mike Sheehan, Principal of Runshaw who left to follow church work in Salford.

Mike has been a fantastic friend and supporter of Balshaws, particularly since Engineering Status. He has opened up avenues we could never have dreamed of within Runshaw and beyond. Thanks to Runshaw's generosity, Transform is printed twice a year.

It is through Mike and Rev Gibb from St Andrew's

together with the Diocese that we have been working so closely together with our joint Chaplain Ruth Taylor who left us when she got married in July.

We welcome Mike's successor Kathy Passant.

Thank you Mike and Ruth. We wish you every happiness with your future plans.



ROTARY YOUNG PHOTOGRAPHER OF THE YEAR

Success for Balshaw pupils

■ THE ROTARY YOUNG PHOTOGRAPHER COMPETITION RUNS FROM THE BEGINNING

of Rotary Club Year to the end of November. For 2007 it was run on an 'open subject' theme. It is now in its fourth year and the competition has grown both in number of entries and quality.

Balshaw's entered the Under 12 and 12-15 categories.

The competition was judged by two professional photographers who were very impressed with the overall standard of the entries. There was a wide choice of subject, the candidates' interpretation of scenes, and some interesting digital editing techniques.

The first prize winners in each group receive an engraved trophy and all of the winners receive certificates, book tokens and a 6 months subscription to Digital Camera Magazine. They are also able to spend some time with a professional photographer.

This year Balshaw's got a first prize in the 12-15 year category with a photograph by Jack Tattersall, entitled "Girl with Sunglasses".

We also got 2nd place in the Under 12's with Jacob Matthew Ashton's photograph of "Hermit Crab".

Both of these photographs appeared in the Rotary International Magazine for the area.

Thank you to Mr Crabtree for his help with the competition.



ALL THE FUN OF THE FAIR Engineering lifts off

■ THE ENGINEERING THEME EVEN PERMEATED THIS YEAR'S SPRING FAIR

which is the major fundraising activity of the Balshaw's Association. This year's money raised, over £8,000, will go to finishing the Memorial Garden dedicated to staff and students associated with Balshaw's over the years.

The fair was held on 10 May and was opened by Dave and Julia Croft, Dave former Deputy Head and Julia, formerly

Head of Clayton House.

As to the Engineering? Whether you tried your hand at the Aerodynamics of the Crazy Bike, the shooting range or the many other games of skill, could be added to the ride in a Hot Air Balloon courtesy of Unison, or the chance to win a flight in a glider. This was a prize given by Mr & Mrs Dean, and the lucky winner was Gary Tetlow. Chance to engineer your way out of a maze or gain a prize in the Balloon Race were amongst the endless possibilities. The furthest the balloons have reached so far is 6 miles out to sea from Blackpool, found by K Atkinson in a fishing boat. If you didn't attend this year, keep a slot in your diary for next year.

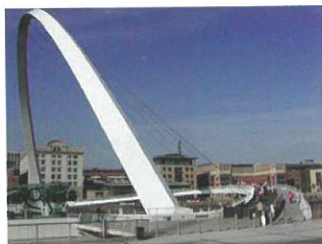


GATESHEAD MILLENNIUM FOOTBRIDGE

An amazing achievement

■ WHEN MR MELLING REPRESENTED US AT THE NATIONAL ENGINEERING CONFERENCE

he had the opportunity of meeting people who had been engineers of the Angel of the North and the Gateshead Millennium Bridge. He said that they were both very impressive.



DID YOU KNOW?

- The top of the bridge is 50 metres above river level and its foundations are 30 metres deep.
- The bridge weighs more than 850 tonnes which is enough steel to make 64 double-decker buses, like the sort they used to make in Leyland.
- It sits on 19,000 tonnes of concrete which is enough to make 600,000 paving stones that would stretch 290 kilometres if laid end to end.
- Each opening and closing of the bridge "eyelid" takes 4 minutes.
- Each opening and closing of the bridge is powered by electric motors totalling 440 kilowatts which is more power than 8 cars use.

The Gateshead Millennium Bridge is an amazing achievement and has been admired throughout the world for its innovative structure and functions.

Designing and building bridges requires a combination of skills, as well as doing its bit for the environment - for instance litter dropped on the bridge is automatically collected in traps each time the bridge opens? Like so much of engineering, the bridge has regenerated the local riverside, and brought money and jobs to the area.

The Gateshead Millennium Bridge and other building projects have been the inspiration behind many artistic works.

ALWAYS CHANGING!

Report from the ICT Department

■ THIS YEAR HAS ONCE AGAIN BEEN ONE OF CHANGE! ICT NEVER STAYS THE SAME!

We have said goodbye to one of the best web-teams we have ever had and our new team have started to learn the skills to keep the proud tradition going, that of pupils running the external site!



We have also adopted a new system of how we actually make the web site. We have abandoned actually writing in HTML, replacing it with the County system, with simpler editing functions.

The external web site is aimed at past and prospective students as well as parents. However we have included many features that are useful for current students as well.

We have links to important educational web-sites, the latest news from the school, a tremendous section of old school photographs, information on staff, the history of the school, a calendar and links to important school policies. Users can also "take a pictorial tour of the school" which incorporates photos of the new rooms and corridors.

Check the site out at: <http://www.balshaws.lancs.sch.uk>

School now has over 300 computers and 5 specialist ICT rooms, a far cry from the days of only 15 BBC machines in one room!

The department runs 3 courses at KS4, GCSE's in ICT and Business & Communications and lately an ECDL (part 1) course. We have in fact become a registered centre for ECDL.

The ICT department has produced many students who have gone on to work in computers, many in the USA. The most famous being Kim Libreri, who won an Oscar for his work on the Matrix. He is now Vice-President of Digital Domain, Inc., one of the world's largest and most technically advanced digital production studios, this was formed in 1993 by CEO Scott Ross. Academy Award® winning character and creature designer Stan Winston (the Jurassic Park films; Edward Scissorhands; Aliens; The Terminator films).

<http://www.zoominfo.com/Search/PersonDetail.aspx?PersonID=26480329>

BALSHAW'S BEAUTIES MOONLIGHT WALK

Staff walk 13 miles for St. Catherine's Hospice



■ WHAT MORE PERFECT EXAMPLE OF ENGINEERING THAN THE HUMAN BODY, WITH

all parts working together to achieve an aim. The mind and brain giving the adrenalin and determination, the stamina provided by the toned up muscles, all working together to complete a half marathon.

Yes, our bodies were certainly tested to the limit on a recent

cold evening in June. The occasion was the second annual Moonlight Walk in aid of St. Catherine's Hospice. A team of 13 'Beauties' from Balshaw's walked 13 miles through the streets of Preston in the early hours of Sunday morning.

The team had trained for several months prior to the event, some staff even using pedometers to measure their progress. As the date drew nearer, talk in the staff room became more and more competitive with staff regularly comparing their weekend 'mileage' and blisters each Monday morning.

The walk itself was challenging, we met a few 'unusual' people on the way, but the feeling of achievement we felt as we crossed the finish line made it all worthwhile. The team managed to raise over £1,000 (which included donations from staff and pupils) for St. Catherine's. Many thanks to all governors, staff, parents and pupils for their support.

Already Balshaw's Beauties are planning next year's fundraising event!

Jo Maxwell

SPRINGWATCH

■ YR 7'S WERE SET THE TASK TO PRODUCE "A SPRINGWATCH PRESENTATION".

Among these was Thomas Hughes who produced a documentary on the diversity of Britain's changing Wildlife. His magnificent documentary discovered the life behind the Pigmy Shrew, Britain's smallest rodent, weighing as much as a 10 pence coin.

Also Thomas came face to face with a family of Coots. The family consists of a male, female and three fledglings. All the footage taken of the family was carefully decided so not to disturb the nest. Thomas's fascinating incite into the nature of Britain took hours of passion, patience and lots of editing. This stunning piece of work will eventually be sent to the BBC, for their Springwatch crew to discover what the yr 7s at Balshaw's have been studying in their Science lessons. The full presentation will shortly be available to view on the Balshaw's website. Thomas is currently working on a new wildlife documentary. On the right are some stills taken from the film.

Thomas Hughes (Year 7)





BELGIAN BATTLEFIELDS

Pupils visit the front line

■ ON 28TH MARCH, IN THE EARLY HOURS WE CLAMBERED ON BOARD THE COACH AND

travelled down to Dover. We arrived at Kortrijk at about 5 pm and were treated to Belgian cuisine! The first day of our tour of the 1st World War battlefields began at Vimy Ridge. It is here you get the best idea of how close the two sets of trenches were to each other and how brutal the fighting must have been. We then moved on to Beaumont Hamel on the Somme, where, on the 1st July 1916, the Canadian Newfoundland Battalion of 830 strong suffered appalling casualties with over 750 men either dead or wounded before they even reached their own front line. This really brought home the pointless nature of war. The caribou memorial facing out towards no-man's land is a testament to the many allied and German troops who were slaughtered here. We also managed to visit the section of front line from where the Chorley Pals emerged on the first day of the Somme. They were mown down by German machine gun fire, so close to their own trenches. Our last stop was the memorial to the missing at Thiepval – holding over 73,000 names of soldiers whose remains simply sank into the Somme mud without trace!

Visits on day two included the 'In Flanders Fields' museum, Hooze crater and Sanctuary Wood. It was at Sanctuary that everyone had the chance to walk in the footsteps of a frontline soldier, trudging through muddy trenches and dark rat infested tunnels! It was near here at Hill 62 that the work of the Royal Engineers and their Tunneling companies was illustrated. As the stalemate progressed the work of Engineers on both sides became more prevalent. Explosives were laid to

try and gain any advantage over the enemy. As a result many Royal Engineers became casualties or even paid the ultimate sacrifice.

We also visited Langemarck German Cemetery. It was a gloomy place, in contrast to the nearby Tyne Cot which is the largest British military cemetery. 12,000 gleaming white headstones stood in parade ground order as a fitting testament to the tragic loss of life during the Battle of Passchendaele.

On our the last night we enjoyed a large plate of chicken and chips in a restaurant on the main square of Ypres. It was here that Mr. Morgan was devastated on hearing that Everton had lost to Liverpool – we teased him about it relentlessly! The visit ended with us attending the Last Post ceremony underneath the Menin Gate which occurs every evening at 8pm. Some were driven to tears as they thought about the soldiers who had lost their lives.

The following morning we congratulated Lucy and Danielle on their stunning art work for the visitors' book at the hostel and then set off. We arrived home on the Monday evening tired after a fantastic four days away.

Thank you to all the staff involved for organising and leading this trip. It was an enjoyable time, and extremely moving and thought provoking. Visiting the Polish memorial near Vimy was especially poignant for Michael Williams whose family are Polish, as was attending the grave of Andrew Holland's Great Uncle.

By Sophie Aspinall CL7 & Mr. Morgan

AFTER-SCHOOL COOKERY CLUB

Hosting a buffet for families and Miss Venn



THE NEW FOOD TECHNOLOGY FACILITIES WERE USED FOR BALSRAW'S FIRST AFTER

school Cookery Club. 20 Year 7 pupils, under the able tutorage and extreme patience of Food Technology teacher Mrs Thomas, spent one evening a week for 6 weeks learning how to prepare dishes from the Lancashire Healthy Schools programme Healthy Cookbook. They then used their improved skills and knowledge to prepare and host a buffet for their families and Headteacher Miss Venn. They also used this opportunity to welcome new Deputy Headteacher Mr Morgan, who promised to try out some of the recipes at home. I hope Mrs Morgan was suitably impressed.

Alasdair Bayman was one of the pupils attending the club. He invited his sister Vicky and Grandmother Mrs Simpson to sample the results of his hard work.

HERE ARE THEIR COMMENTS...

After sampling the array of dishes, which was one to behold, I and the other parents in attendance must congratulate the budding chefs for their achievements. Mrs Simpson

Grandmother of Alasdair Bayman

I never knew my brother was such a good cook. The food was delicious! I am looking forward to him using his skills more often by making the tea at home!

Vicky Bayman, Alasdair's sister.

SPECIALIST SCHOOLS & ACADEMIES TRUST PUPIL VOICE

Balshaw representatives present their findings



ALEXANDER KELLY YEAR 7, JESSICA NEWTON YEAR 8, ALEXANDER TAZIKER

and Joseph Morris both Year 9, recently represented the school by participating in the Specialist Schools and Academies Trust pupil voice programme.

They undertook 'Learning Walk' events at Shevington High School, Wigan, a Specialist College for Technology, and Ormskirk School, a Specialist Visual & Performing Arts College. They also hosted 'Learning Walks' at Balshaw's for pupils from Ormskirk School. They were looking at how Specialist School status in different curriculum areas affects the resources and learning opportunities not only for pupils attending the school but also for the whole school community through their outreach programmes. Our pupils then presented their findings at a Specialist Schools and Academies Trust meeting. We found that Specialist School status in all areas provides improved facilities for all the pupils at the school, whatever their interests and abilities. It also enables the schools to forge extensive links with pupils from schools in their surrounding areas by offering a wider range of learning opportunities and support. The pupils from Ormskirk School were particularly impressed by the way Balshaw's had embraced 21st Century Technology and Engineering yet still retained its valuable sense of history and tradition. We will be continuing our links with the schools taking part in this programme by hosting the events next year. The photograph shows our pupils presenting their findings of their Learning Walk.

MEMORIAL GARDEN

Work has started on the Memorial Garden. When this work has been finished it will be a fantastic tribute to the staff and pupils who have sadly died in the past few years.



TRANSITION EVENT

June 25th 2008



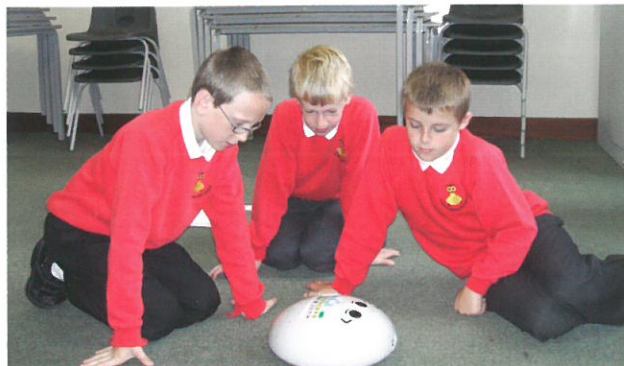
■ THE OLYMPICS STARTED EARLY AT BALSHAW'S. COMPETITORS FROM LEYLAND

Methodist Schools Year 6 competed in a **Mathematical Pentathlon**.

They used their mathematical skills by taking part in a variety of 'Track and Field' events as well as visiting the Olympic Village.

SOME OF THE MATHEMATICAL SKILLS INVOLVED WERE:

- Finding the mean average of paper plate discus throws.
- Programming Romero, the robotic athlete, to find his



way around the athletics arena

- Displaying medal data from the 2004 Olympic games
- Finding the cost of meals using different currencies at the Olympic food court.
- Algebra skills tested in a relay race

The morning's activities finished with all competitors receiving medals. They returned to their school exhausted but enthusiastic about returning to Balshaw's in September.

J Purcell

ALL MANKIND GIG

■ RICHARD, DORNY, DAVE AND GAVIN MAKE UP THE BAND ALL MANKIND

(previously known as The Richard Beeston Band). The band came all the way from Australia and visited Leyland! Over the past 3 years, they've ventured beyond the realms of Leyland, performing over 500 shows to more than 100,000 people, across Australia, the US & UK. All Mankind have found critical success at home and abroad, becoming finalists for songwriting & performance awards including MusicOz in Australia, and the Indie Alliance Awards in the US. The band came in to Balshaw's and Dorny and Richard took part in a Year 7 assembly. We heard a track from their album and Dorny and Richard were interviewed about their music, their Christian faith, and what they like about Leyland. The Years 7s took part in Dorny and Richard's quiz. The band came into the lunch club 'What if?' and pupils interviewed the band about their faith, their music, and all things Australian. On the Saturday night, the band did a gig at St Andrew's and

some pupils came along. On the engineering side, we could get a glimpse of all the technical equipment needed to put the gig together. Alison Bird (Year 9 pupil) has said what she thought of the gig...

"The gig was awesome! The atmosphere was great and I was up on my feet for every song, clapping and dancing. It was a really good experience, praising God in a modern, and fun way. The band was excellent, involving everyone and getting us to sing along. It was a night to remember!"



BALSHAW'S STUDENTS WIN NATIONAL COMMUNICATION AWARD

Pupils win the BT Seen and Heard Award

■ YEAR 11 STUDENTS FROM WORDEN 9 TUTOR GROUP RECENTLY WON THE BT SEEN

and Heard Award at a ceremony held at the Merseyside Youth Association in Liverpool. The awards are aimed at recognising the part that young people have to play in the development of their local communities.

The students have spent the past two years raising funds for the Memorial Garden Project to build a garden in the school "quad" area in memory of their classmate Ryan Masterman and other members of the school who have passed away through the years. All 21 students have been involved in some way; from delivering flyers for events during their newspaper rounds, to organising stalls at Spring Fair.

Louise Ellman, the labour MP for Merseyside presented representatives of the group with the prestigious award.

Worden 9 students Emily Owen, Will Holme, Charlotte Cheng and Olivia Nelson receive their award from Louise Ellman MP.



THE LITTLE MATHEMATICIAN

■ KIMLAM NGUYEN, A YEAR 3 BOY FROM LANCASTER LANE COMMUNITY PRIMARY SCHOOL,

attends Balshaw's for an hourly mathematics lesson given by Miss Rhodes.

Mrs Purcell (Head of Mathematics) was contacted by his primary school because Kimlam was working at a far higher level in mathematics than is expected for his age, and his primary school needed support and expertise to deal with his unique ability.

Since January Kimlam, his mum and little sister have met with Miss Rhodes, for an hourly mathematics lesson. Kimlam has covered topics such as Pythagoras' theorem and solving equations.



All this hard work has been rewarded because Kimlam was entered for the Junior UK Mathematical challenge along with pupils from our Year 7 and Year 8. He has achieved a wonderful Silver certificate.

Well Done Kimlam!

LRhodes

4 YEARS ON

Balshaw as a specialist school

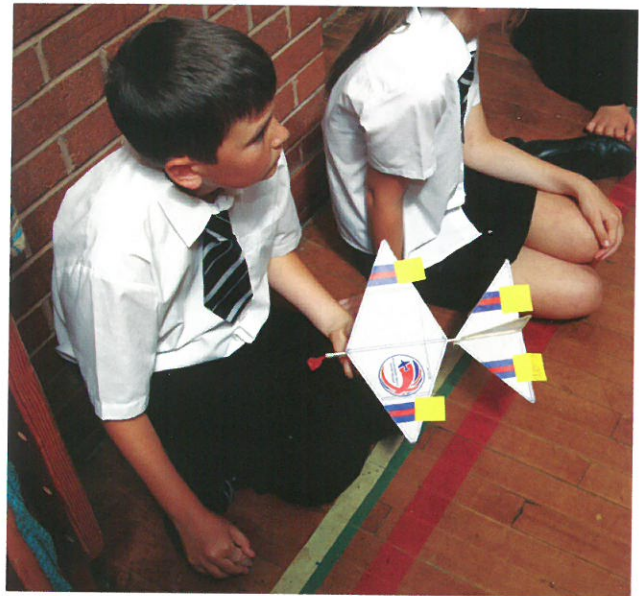
■ IT ONLY SEEMS LIKE YESTERDAY SINCE WE BECAME A SPECIALIST SCHOOL IN ENGINEERING

but it's in fact 4 years. We should now be waiting to see if we are to be allowed to carry on being a Specialist School but changes in the rules mean we now have to wait until our next OFSTED inspection to learn our fate.

Looking back on what we've achieved so far fills me with pride at the amount of hard work both pupils and teachers have put into our Specialist School status. It is difficult to pick out highlights but the Engineering Celebration Day and how much the specialism has changed both the appearance and the curriculum of the school must be up there. 4 years ago the Maths department's classrooms were spread all over the school and the electronics room was a good distance from the D&T block which was itself in need of a great deal of TLC. Both of these core departments are now joined together and provide a stimulating environment in which the pupils can thrive. There were only 2 interactive whiteboard/projector systems in the school 4 years ago, we now have 47 and the vast majority of these have been paid for from our Specialist School funding. 3 extra members of staff are also being paid for from this funding and their contribution to Maths, Science and ICT support is invaluable.

We have hosted many events including 2 very successful North West regional Engineering Steering Group meetings at which we showcased the work we are involved in. Following on from the latest meeting staff from the D&T department were invited to present at a regional conference on developing creativity in the curriculum. The Transform magazine itself has been published on the Specialist School and Academies (SSAT) website as an example of excellent practice and one that other schools may wish to copy. We now have 2 teachers, Mrs Thomas and Miss O'Brien, who are both SSAT Lead Practitioners which is a huge achievement. They are both working in the wider community to spread good practice from Balshaw's.

What about the future? We have recently been awarded Pathfinder status for the governments STEM (Science, Technology, Engineering and Maths) initiative. A great honour considering only 3 of the countries 68 Engineering Specialist Schools were invited. We have been given £10,000 to develop what we are already doing at Balshaw's and share it with other schools. The next 3 years will also see us introducing new sets of targets and exciting developments both in school and the wider community that will expand the



range of opportunities for Balshaw's pupils even further.

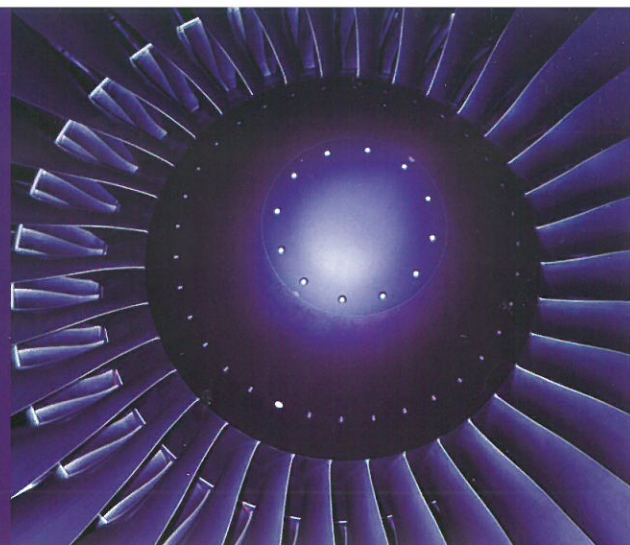
I am confident that at our next OFSTED inspection not only will we be allowed to carry on but will be encouraged to expand our role within the Specialist Schools community.

Mr D Melling, Director of Engineering

NUCLEUS

BALSHAW'S SCIENCE NEWS

An update of past and future trips, new exciting technology and facilities in the Science Department



TRIPLE SCIENCE STUDENTS VISIT A BREWERY!

In April, members of the inaugural Separate Science GCSE Class visited Allgates Brewery in Wigan to learn about the Microbiology behind the brewing process.

Malting, Extraction, Fermentation and the addition of hops were investigated as students tasted some of the brews.

Thirty four Year 11 students have been studying for three separate GCSE's in Biology, Chemistry and Physics this year.

Watch out for news of their results in the next issue!



Students learn how to pour the perfect pint



Mr Melling shows them how its done

SALTERS CHEMISTRY CHALLENGE!



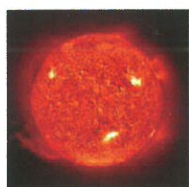
In May, a team of four Year 7 pupils visited the University of Liverpool to take part in the Salters Chemistry Challenge. In the morning the teams had to use their analytical Chemistry to

identify the thief in a robbery.

Then pupils were set the task of devising a method of cooling the Starship Enterprise's dilithium crystal (in serious danger of overheating) to exactly 10.5°C using just 2 simple chemicals and some water!

A great day out was completed with an exciting display of chemical reactions by Dr Helen Aspinall

ANYONE FOR ASTRONOMY?



The Science Department has invited 30 Year 8 pupils to begin studying for a GCSE in Astronomy every Friday after school throughout Year 9. Pupils will study the stars and constellations, the

solar system and of course look at the evidence for life on other planets!

Astronomy is one of the oldest Sciences in the world and involves the study of celestial objects such as stars, planets, comets and galaxies. Famous names including Copernicus, Galileo and Johannes Kepler were all vital in building up the picture of our solar system as it is today.

Who knows we might have the next Neil Armstrong or even Stephen Hawking in our midst!?

What do you think? Let us know?

science@balshawshigh.co.uk

THE WASP STUDIO TOURS

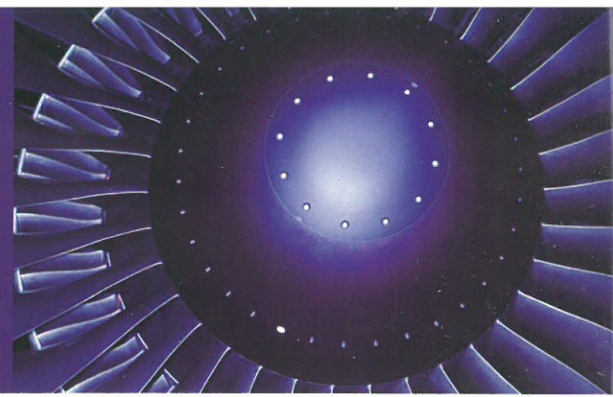


On Friday 25th April the Year 8 Wildlife Club attended the WASP Studio Tours at Penwortham Environment Education Centre. Pupils got involved in filming their very own wildlife TV shows aided by WASP's very own directors Tim, Graeme and Dan.

The pupils had a fantastic time and even won their very own clapperboard for best film!

NUCLEUS

CONT.



FOCUS ON... DARWIN

On the 200th anniversary of his birth

■ CHARLES ROBERT DARWIN WAS BORN IN 1809 AND WAS A GEOLOGIST, NATURALIST



Darwin was often satirised because of his controversial theories. This image of him as half man-half ape appeared in the political comedic periodical "Hornet".

and is now hailed as the Father of Evolutionary Biology.

He studied Medicine at Edinburgh University but it was during his time at Cambridge where he studied Theology that he became interested in the Natural World.

In 1831 Darwin was invited to accompany the captain of HMS Beagle as the ships Naturalist, on a

planned two year visit to South America. It was a journey that was to change his life.

The Beagle survey took five years and throughout Darwin methodically collected an enormous number of specimens, many of them new to Science.

In 1837, back in Cambridge, Darwin began to formulate his theories. He looked at the variety of specimens he had collected and noticed that from his visit to the Galapagos

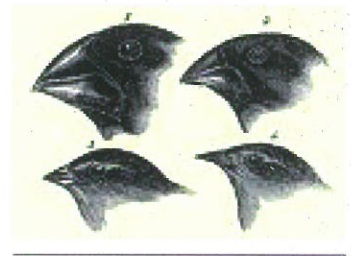
Darwin concluded that the birds with the beaks best suited to each island would be more likely to survive, reproduce and so that bird would become prevalent on that particular island.

On the 22nd November 1859 Darwin published the most famous Science book of all time "The Origin of the Species" in which he described his findings.

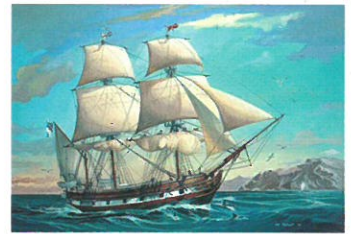
But it was to be many years before his theory would become widely accepted as there was public outcry that anyone would challenge the theory of creation.

Today Darwin's scientific discovery remains the foundation of Biology as it provides a logical, proven explanation for the diversity we see in the life on earth.

2009 is Darwin 200th birthday. Watch out for special events at Balshaw's to mark the occasion!



Darwin's finches and their very different beaks



The famous ship that Darwin sailed on; the "HMS Beagle"

SCIENCE CLUB - SKIP FOR HEART!

In June the Year 7 Science Club took part in a sponsored skip to raise money for the British Heart Foundation.

Did you know that the average human heart beats 2.5 billion times in a lifetime!

The BHF raise money to fund research into finding cures for Heart Disease and to promote a healthy lifestyle.

Well Done to all those who took part!

