



# NEWSLETTER

ISSUE NO 4, DECEMBER 2005

## INTRODUCTION

Welcome to the second year of our specialist schools status in mathematics and ICT. In this introduction I aim to give you a snapshot of some of the activities that happened last year together with what we plan to do this year within the maths and computing faculty.

The first year of our designation was an exciting one with the building of the Turing Suite giving us state of the art ICT facilities for use by students and the wider community. The mathematics department benefited by receiving four interactive whiteboards and a trolley of 30 laptops. This ICT equipment should help us to develop a more dynamic learning experience for pupils and was particularly helpful during the cross-curricular Business and Mathematics day for year 10. This day involved pupils having to respond to a virtual stock market simulation and deciding when to sell or buy stocks and shares.

The Key Stage 3 maths club has proven to be very popular with students on a Tuesday from 3.45-4.45 pm and we envisage a similar club for Key Stage 4 pupils in the near future. The ICT department has also arranged for a drop in session at lunchtimes to help pupils with their work.

As well as concentrating on the pupils within our school we have also developed courses and partnerships with the wider community. We worked with 3 partner primary schools namely, Northgate, Thorley Hill and St Michael's. The lessons we delivered to their pupils were designed to support the needs of each individual school in the form of either a maths club or booster lessons to enable students to prepare for their Key Stage 2 exams. It proved to be a great success and we welcome All Saint's and Little Hallingbury to join us this year.

Year two sees us trying to improve on last year's efforts. We continue to develop our range of teaching styles in order to address the needs of all our pupils. Two members of the mathematics department have been trialling CAME (Cognitive Acceleration in Mathematics Education) materials with year seven pupils. These materials designed by King's College London are designed to help pupils make quicker progress in mathematics.

After our very successful Business and Maths day with year 10 last year we aim to run a Maths and Geography day later this year and further develop cross-curricular days with other faculties.

In addition we are looking to help parents help their children with mathematics. On Thursday 8<sup>th</sup> December we ran a free taster course for parents entitled "Helping your child with Year 7 maths". The objective of this course was to enable parents to help and guide their sons with the classwork and homework they are going to be doing next term. We are delighted to report that this course will commence in January and will be free of charge to parents with sons in the School. More details to follow.



We are continuing to support our partner primary schools by offering them ICT Network support and enrichment activities for their pupils. This may take the form of maths trails around their school this year! We are also running a nationally recognised “Computer Club for girls” (<http://www.cc4g.net>) course at The Herts and Essex High School.

We have also expanded the range of courses delivered for the community in the Turing Suite during the Autumn Term to include - Web Design, ECDL – The European Computer Driving License, Word, Powerpoint, A+, Network+; Family Finance and Improve your Maths. Courses planned for the Spring Term are listed on the last page of this newsletter.

Following the publication of the joint Community Course publication to all parents of pupils in the town the group are now focused on auditing the professional development needs of teachers within the consortium. Each of the Specialist Schools will be hosting meetings of subject leaders within their specialisms to discuss ways in which we can share good practice. A programme of Consortium Inset courses will emerge next year. In addition we are going to develop a programme of curriculum enhancement opportunities for students within the remit of our specialist plans

We are looking forward to the challenge of improving the education of both our pupils and those in the wider community this year.

Yours sincerely,

Graham Gunn (Head of Maths and Computing Faculty)

## Mathematics Lecture

Following on from last year’s ‘101 uses for the Quadratic Equation’, this year The Bishop’s Stortford High School played host to Dr David Acheson of Jesus College, Oxford, with his lecture ‘1089 and all that’.

The Lecture was attended by a variety of schools from the area with ages from Year 8 through to 13. Even Maths Department greats Mr Taylor and Mr Yates returned for the event.

This year’s talk was based on Dr Acheson’s book ‘1089 and all that’ and featured topics such as pendulum movement, differential equations, music and infinity appeared for a second.

The lecture was thoroughly enjoyed by all and we look forward to next years. Thanks must go to Mr Burani for organising the event.



## A-Level Mathematics-in-Action Day

On Tuesday 22 November 15 upper school mathematicians, accompanied by two teachers, attended the annual Mathematics-In-Action lectures at the University of London, Institute of Education. This proved an invaluable experience for the students to see some of the many real world applications of mathematics. For the teachers it provided numerous responses to the dreaded question they always get, "When am I ever gonna need this in real life Sir?"

The lectures included:

- Rob Eastaway explaining the use of game theory in Economics to solve bargaining and competition problems.
- Robert Matthews showed how the powerful Bayes's Theorem in probability can prove or disprove the existence of God, depending on how you look at it.
- Dr Emma McCoy demonstrated how the use of graph theory and magic squares could be employed to improve your Sudoku skills.
- And Professor Chris Budd, (who did the annual TBSHS Mathematics lecture two years ago) explained how Maths can be used to solve murders and other crimes.

The day was thoroughly enjoyed by all and hopefully the students will now look upon their Maths lessons in a different light.

## Senior Mathematics Challenge 2005

On 8 November around 80 students in the sixth form participated in the Senior Maths Challenge. This is the first time at the T.B.S.H.S. that almost every A-Level Mathematics student has taken part and will hopefully raise the profile of the event for future years. The questions involved various puzzles and problems that required no specific Mathematical knowledge, just a keen mind. Have a go at the problem below.

*The four statements in the box below refer to a mother and her four daughters. One statement is true, three statements are false. Who is the mother? (A: Alice, B: Beth, C: Carol, D: Diane or E: Ella.) (Solution is at the end of this article.)*

*Alice is the mother.*

*Carol and Ella are both daughters.*

*Beth is the mother.*

*One of Alice, Diane or Ella is the mother.*

The school did fantastically well over all with 16 Bronze and 14 Silver award winners. The 3 Gold awards went to Oliver Williams (Yr 12), Matthew Stemp (Yr 13) with best in school going to Hendrik du Toit (Yr 13, who qualified for the British Olympiad test.) This high percentage of award winners is a testament to the quality of mathematics students in the T.B.S.H.S sixth form.

Answer: E

## Revision Help on the Web

All TBSHS pupils are registered with the SAM Learning revision web site. Home users would normally pay £100 to subscribe. TBSHS pupils can use the site for free at home or at school.

The site is packed with examination activities and has sections for Key Stage 3 SATs, GCSE and A-levels.

Visit the site at <http://www.samlearning.com>

Learners need 3 details to login,

**School ID**  
CM23 BS4

**User ID**  
Date of birth followed by two initials; first name then last name. Example: **010885DJ** is the User ID for David Jones born 1st Aug 1985.

**Password**  
Initially same as User ID, you should change your password as soon as you login.

Learner accounts were set up for all of our pupils during the last academic year. For these pupils, passwords have not changed. Forgotten passwords can be retrieved through the web site or by seeing Mr Atkinson at school.

## Mathematical Involvement in the Local Community

We were pleased to host a meeting with five of our main Primary Schools and also three of the local Secondary Schools this term.

We are committed to supporting St Michaels JMI, Northgate JMI, All Saints JMI, Little Hallingbury JMI and Thorley Hill JMI with extending the mathematical ability of some of their students. The support will take place over the next two terms and hopefully help to enthuse their students in time for the Key Stage 2 SATs.

More recently the Heads of Maths from Hockerill Anglo-European College, The Herts and Essex High School and The Leventhorpe School all visited to discuss issues we have in common,. The main initiative from the discussions was to construct an inter-school challenge which we hope will take place in the Summer Term at TBSHS and will be keenly fought between Year 9 and 10 students.



## **Enterprise Week November 14 – 18, 2005**

Enterprise Week 2005 allowed various year groups to participate in a series of activities with a central theme of networking. The week, masterminded by Mr Simmons, was a chance for numerous year groups to promote their entrepreneurial skills and challenge their understanding of what it means to be enterprising.

The week started with a Yr 10 National Challenge, a Government sponsored competition with over 1500 schools taking part nationally. The students were briefed and prepared admirably by Mr Gunn, on the attributes of past entrepreneurs, which was followed by the Challenge going 'live' at 9.30am. The students used their full range of enterprising skills to come up with a presentation on the title 'Put where you live on the map'. With limited time and resources, the students created a wealth of different ideas, from Marshmallow World to Skyway, fully supported by the Internet available through the school's laptops. With networking being an essential theme all teams and teachers were ably supported by A2 Business Studies students who acted as 'financial advisors' for the Business planning section of the challenge. The winners were decided by a play off professionally judged by the Applied Business Studies students.

Tuesday 15 November was Olympic Day, Year 7 competed in teams to create a presentation based around London 2012. The tasks ranged from problem solving, promotional design and organisational skills. Mr Watson produced various DT Graphic based activities designed to create an enterprising culture within the year group. Year 7 entered enthusiastically into the day creating very thorough and interesting presentations. The tasks were interpreted in different ways and their presentations were representative of the IT facilities available to them, the laptops were put to good use, as were scanners and digital cameras. Once again networking was a central theme and the AVCE Business students provided sterling IT support and business input throughout the day. The five best presentations were involved in a Grand Final, displaying the best enterprising features that TBSHS can offer.

Women & Social Enterprise Day took place throughout Wednesday 16 November, the Sixth Form Interact Committee fully committed to the charitable side of enterprise, raising over £600 for Breast Cancer Awareness. They produced a thoroughly enjoyable fund raising day, which highlighted the social side of enterprise within the School.

The final day of Enterprise Week was Friday 18 November, this centred on two different competitions focusing on Enterprise culture and the students understanding of the wider business world. The winners from the Government Challenge represented the School in the East of England Regional Final at the Stansted Hilton. They produced a powerful presentation on the merits of a 'Skyway' transportation system which would not only put Bishop's Stortford on the map, but also help solve the pollution caused by cars. The Year 10 students must be congratulated on taking second place and high commendation from the judges on their performance.

At the same time TBSHS hosted the inaugural Business Challenge against Leventhorpe School, three teams of Year 10 students competed in a business planning presentation. In order to add to the authenticity of the event Independent Business Consultants were invited to judge the students. The students produced different scenarios, all judged on their entrepreneurial spirit and enterprising nature, with TBSHS walking away with the winning team. The inaugural Enterprise Week at TBSHS has allowed many different year groups to work together, providing a real taste of the world of work. The students were challenged through different tasks and activities, responding in the best traditions of an Enterprising School.

# Stop Press - The School has just been Awarded the NAACE Mark

The Naacemmark has been developed by Naace, in association with Becta. It is an award which recognises a school's success in developing and implementing a strategic approach to ICT. It provides a framework for using ICT to enhance teaching and learning and provides opportunities for the school community to develop ICT capability.

The aim with the quality in ICT mark for schools is to:

- promote the importance of ICT to the curriculum
- improve the effective use of ICT in teaching and learning
- promotes quality provision in the teaching of ICT
- improve the use of ICT as a management tool to enhance provision and communication
- disseminate good practice

We have been judged for the award against ten criteria which make up the quality standard, including a strategic action plan, a planned approach to using ICT and targets for improving performance and resources.

## **Courses in the Turing Suite**

The Tutors plan to continue on Monday evenings during the Spring Term with Network+, A+, ECDL and Web Design and to commence two new courses: Access and Advanced Excel.

The Tutor delivering Family Finance and Improve your Maths will also be continuing her courses on a Tuesday evening.

For more information concerning any of these courses please contact Mrs Sue Smith at School.

