



As we approach Christmas we remember those for whom Christmas is a difficult time. During Advent Students have been collecting food for people experiencing hardship. Thank you for all contributions which will go to the Gatehouse and Storehouse. A reminder that Gatehouse will be using the USC site on Christmas day to provide Christmas dinner for those experiencing difficulties.



Year 10 Retreat

Year 10 students have experienced a retreat this week where they had the opportunity to explore their beliefs in a more informal setting. The diocesan Ignite team led students in discussions and reflections aimed at helping students to think about themselves, their families, friends and their place in the world. Thank you to all involved in this, especially Matt Spiller, Ignite and Fr Jay.

Year 11

Thank you to all staff, parents, carers and students who attended the Year 11 parents evening last night. We deliberately held the evening on the same day as our 'mock results day' so there was a clear focus for the discussions. The evening went very well and gave students and parents a very clear plan for moving forwards into the New Year. Year 11 mentoring day takes place next Tuesday and will be another opportunity for students to discuss strengths and areas for development.

Certificate Tea for past students at university and sixth formers

We have our annual certificate tea in the hall at the USC on Tuesday at 4pm. This is an informal opportunity to collect A' Level and GCSE certificates and catch up with old school friends over a cup of tea. It is not a compulsory event and does not have a formal opening or ending. You will be made very welcome.

Kate Pereira

A New House System at St Benedict's

We are delighted to announce that a new House system will come into effect in the New Year at St Benedict's. All staff and students have been placed in a House, with students finding out which House they have been allocated in the first week back after the Christmas holidays.

Houses will compete against each other in a number of competitions and events such as: House winter and summer sports, public speaking and charity fundraising to name but a few. There will also be a House Attendance Cup and a House Work Cup. The purpose of our House system is to help build the characteristics that we want to see in our young people such as: teamwork, participation, service and leadership. This system will help create the well-rounded individuals that we as a school want to send out into the world.

There will be four Houses in total and siblings will be placed in the same House. The names of the Houses were decided through a student vote and I am delighted that I can now inform you of the winning names which are:

- Caritas
- Industria
- Patientia
- Humanitas

These are the Latin names for four of the seven virtues that have been identified by the Catholic Church as essential characteristics in Christians. The English translations are as follows: Caritas is Charity, Industria is Diligence, Patientia is Patience and Humanitas is Kindness. Each House has also been assigned a colour, with Caritas being assigned yellow, Industria white, Patientia blue and Humanitas red.

More news will follow but for now, let the games begin!

Mr Croucher

Careers Talks



On Thursday, Mr Wright and Ms Coogan led a careers talk all about the teaching profession.

They talked about the ways to get into teaching, traditionally through a university and teacher training course but also through degrees later on and other courses such as TEFL (Teaching English as a Foreign Language)

They also explained how the typical classroom teacher deals with stress, workload, difficult students and also the pay progression opportunities.

In the media, there are lots of disadvantages broadcasted about teaching in regards to the extra hours and the workload but Mr Wright and Ms Coogan made it clear that these are things that teachers have to deal with but the positives hugely outweigh the negatives.

All the hours of extra work mean nothing when teachers have the opportunity to be a huge part of and make a significant difference to a student's life.

Overall, I found the talk really interesting as I got an insight to my teacher's life just for half an hour and it has left me food for thought to think about what I would like to do in the future.

If you are thinking of a career in teaching, visit the Government website on how to [get into teaching](#).

Emily Bickers 11CGN

A big thank you to Emily for the article and for her views on the Teaching careers talk and also to Mr Wright and Ms Coogan for delivering the talk. Moving in to the new year we now have three scheduled talks taking place in January with AJ Fleet from CIAT now coming in on the 24th January to talk to students interested in Architecture and the pathways into the industry.

Upcoming Careers Talks

11th January, Clare Lockwood, Oslers Solicitors – Criminal Law

24th January, AJ Fleet, CIAT – Architecture

25th January, Steve Flory, Hudson Group PLC – Graphic Design, Creative Media, Starting your own business.

11th February, Paul Ablitt, Kwikfit – Motor Mechanics, MOT Technicians, Apprenticeship Opportunities

If any Parents or Former Students out there would like the opportunity to come in and run a Careers Talk for our students please contact dsteward@st-benedicts.suffolk.sch.uk and we can arrange a date for you to come in to share your experiences of the work place and the opportunities available in your profession.

Japanese for Beginners

Are you interested in learning Japanese, but don't know where to start?

Starting on Friday the 18th January Charlotte Steggall from the University of Suffolk will be running a weekly Japanese class during lunchtime in room 53.

Places are limited to 25 students and will be allocated on a first come basis.

Please register your interest in any of these events with Mr Steward.

Mr Steward—Careers

GCSEPod—Year 10 and Year 11 parents

The school has purchased an annual license for GCSEPod, which is a website that contains YouTube style videos on most topics taught by each subject. This means that if a student does not quite understand a topic and they are at home, they can watch a GCSEPod which will help them with their understanding. GCSEPod can also be used as part of student's revision and is ideal when re-visiting topics that were taught some time ago.

To login into GCSEPod students need to visit their website which is www.GCSEPod.com once there they need to login by entering their name, date of birth and school before creating their own username and password.

Many of our students have already set up accounts and have reported back how useful they find the videos to be. Therefore, if your child hasn't already registered for GCSEPod please encourage them to do so.

Mr Croucher

Dennis Moore

It is with regret that we have to inform students and parents from St Louis Middle that Dennis the caretaker of the site for many years passed away at the end of last week. He will be known to many as the gentleman who safely crossed their children across the road. Our thoughts and prayers are with his family at this sad time.

Friday 21 December - Last Day of Term

Christmas Jumper and non uniform day

Students return to school Monday 7 January 2019

Flying Reindeer! – update for Christmas 2018



A year ago, in the weeks leading up to Christmas 2017, we explored the possible scientific basis for Santa and his reindeer being able to accomplish their astonishing task of delivering presents to every eligible household in the World during a single night.

The final instalment dealt with the notion of **Flying Reindeer**. Their use of **Fractal Vortex Shedding**¹, enabling the reindeer to obtain aerodynamic lift from their antlers, seemed very plausible for a single reindeer, but there would be severe problems of aerodynamic turbulence resulting from 8 reindeer all being in harness together. This would seriously restrict their speed and stability. I therefore feel that the 'Flying Reindeer' hypothesis needs an update:

What if Santa's reindeer can break NEWTON'S THIRD LAW OF MOTION?

The fundamental principle of this law is that the forces two bodies exert on each other are equal and opposite. Long thought to be inviolable, recent research has found that it may indeed be possible to break this law. It has been claimed that, under certain laboratory conditions, instead of the forces between two bodies being opposite, they may actually be oriented in the same direction^{2,3}. This would result in the two interacting bodies constantly accelerating each other. This is known as **DIAMETRIC DRIVE ACCELERATION**⁴.

Given that the reindeers are harnessed in pairs, they would be ideally placed to make use of this fantastic phenomenon. With the incredible elven R&D resources available to them, maybe the reindeer have themselves become **diametric drive accelerators!**



What is even more intriguing is this: diametric drive acceleration presumes that bodies and materials, under certain conditions, acquire **negative mass**. This is not as fanciful as it sounds, indeed

physicists at Washington State University (USA) have succeeded in creating a fluid with negative mass⁵. Even more exciting is the announcement from the University of Rochester (USA) that they have created a device that actually generates particles with negative mass, known as **polaritons**⁶. This opens up the possibility of putting into practice a theory first proposed in 1994 by a physicist at the University of Wales (UK), Miguel Alcubierre – namely, a **HYPER-FAST WARP DRIVE**⁷. For example, a spacecraft equipped with an **ALCUBIERRE (Hyper-Fast) DRIVE** propulsion system would be able to journey to Earth's nearest star neighbour, Proxima Centauri (4.2 light years away), in a matter of minutes!

So, maybe Santa and his reindeer have equipped themselves with such technology that they can not only traverse our Earth in the blink of an eye at Christmastime, but also the Universe itself!

If you think that it this is really going off into the realms of nonsense, I refer you to a quote given by the great British scientist of the early 20th century, JBS Haldane – he said...

“The Universe is not only stranger than we imagine, it is stranger than we can imagine.”

¹ Vortex shedding and aerodynamic performance of an airfoil with multi-scale trailing edge modifications J Nedić and JC Vassilicos, Turbulence, Mixing and Flow Control Group, Department of Aeronautics, Imperial College London.

² Observation of spatial optical diametric drive acceleration in photonic lattices Yumiao Pei, Yi Hu, Cibo Lou, Daohong Song, Liqin Tang, Jingjun Xu, and Zhigang Chen; Opt. Lett. 43, 118-121 (2018)

³ Statistical Mechanics where Newton's Third Law is Broken A. V. Ivlev, J. Bartnick, M. Heinen, C.-R. Du, V. Nosenko, and H. Löwen; Phys. Rev. X 5, 011035 – Published 26 March 2015

⁴ Optical diametric drive acceleration through action–reaction symmetry breaking Martin Wimmer, Alois Regensburger, Christoph Bersch, Mohammad-Ali Miri, Sascha Batz, Georgy Onishchukov, Demetrios N. Christodoulides & Ulf Peschel; Nature Physics volume 9, pages 780–784 (2013)

⁵ Negative-Mass Hydrodynamics in a Spin-Orbit-Coupled Bose-Einstein Condensate MA Khamehchi, Khalid Hossain, ME Mossman, Yongping Zhang, Th Busch, Michael McNeil Forbes and P Engels; Phys. Rev. Lett. 118, 155301 – published 10 April 2017.

⁶ Anomalous dispersion of microcavity trion-polaritons S Dhara, C Chakraborty, KM Goodfellow, L Qui, TA O'Loughlin, GW Wicks, Subhro Bhattacharjee and AN Vamivakas. Letter - Nature Physics, Vol 14, February 2018.

⁷ The warp drive: hyper-fast travel within general relativity. Miguel Alcubierre. Classical and Quantum Gravity, Volume 11, Number 5 (1994)

John Gregory

Sporting Highlights

The U15 Squad took part in the Rugby County Finals in Ipswich School on 6th December.

The boys were very unfortunate to be placed in the same pool as East Bergholt and Northgate School. With only one team progressing into the next round. Last year St Benedict's narrowly lost to East Bergholt in the final so it was a tough challenge to beat them in our first game.

We lost 5-15 in a very competitive game. The boys produced a number of good performances including Luke Ellis and JP Price leading our attack. East Bergholt went on to comfortably win the competition beating every team with ease compared to bennies.

We played two further games where the boys played some excellent rugby. We beat Northgate school comfortably 25 - 5 with Tom Stevenson playing a captains role always pushing the team forward. JP Price and Luke Ellis scoring excellent tries. Our last was a match against a Farlingaye whom also finished second in their pool. We won the game 19 - 15 in a very competitive game. Fergus Grant and Evan Brown impressed during this game. We always looked in control until the last 5 minutes when the defence was put under pressure but not breached.

It was great days rugby and the year 10's represented the school in the best way with exemplary behaviour and effort. Well done to Brody Olson, Malcom Easton and Benedict Daniel's making their debut for the school. Joseph Marriot for returning to the team after a long term injury.

A good days rugby!

U14 Girls County Football beat County Upper 1– 0

U14 Boys Basketball won 57–6 against Thomas Gainsborough

Year 9 Netball won 12–7 against IES Breckland

Year 7 Netball lost 11–2 against IES Breckland