Head of School Receives NEiTA ASG Inspirational Teaching Award

David Platz is the Astronomy and Astrophysics Head of School and an online Astronomy and Astrophysics teacher. David was humbled but extremely honoured to receive a State and Territory award for his work in developing “The School of Astronomy and Astrophysics” and its online curriculum. David is currently working on ways to expand the benefits of the curriculum to all students from Years 5 to 12 through his links to the worldwide ‘Global Hands-On Universe’ program.

Visit to Universities

David Platz (Head of School) and Jason Pascoe (DP Marketing & HR) recently met with faculty heads and staff of astronomy departments at 10 universities to promote our astronomy education program. It was a rewarding and memorable experience meeting such inspirational people who see value in our school’s agenda to enrich the mathematical and scientific reasoning, modelling & problem solving skills of our students. Every institution kindly offered to provide assistance to our students and teachers with academic support through webinars and vignettes, access to resources, professional placements for students and possible direct entry and subject credit for graduating “Astro” students. A big thank you to the following professional people who took time out of their busy schedules to meet with us - your support is very much appreciated!

Dr Brad Carter, Alex Hons and Kay Lembo, Rhodes Hart - USQ; Prof Michael Drinkwater – UQ; Dr Stephen Hughes – QUT; Dr Debra Vanables – On behalf of the Queensland Chief Scientist; Prof Bryan Gaensler and Dr Jamie Farnes - CAASTRO; Rob Hollow - CSIRO ATNF; Dr Maria Cunningham - UNSW; Assoc. Prof Miroslav Filipovic – UWS; Prof Graeme White and Dr Allan Ernest – CSU; Dr Emma Kirby and Dr Brad Tucker – ANU RSAA; Dr Ian Chubb – Chief Australian Scientist; Prof Andrew Prentice – Monash; Assoc. Prof Chris Fluke and Assoc. Prof Sarah Maddison – Swinburne; Prof Stephen Ritchie - Murdoch (Dean of Education).

Enrolments for Online Senior Astronomy and Senior Astrophysics—2014

Students who are interested in studying Senior Astronomy or Senior Astrophysics online in 2014 should make contact now to request an enrolment pack. To have an enrolment pack posted to you, contact the Head of School on 0427 445 296 or by email learnastro@athertonshs.eq.edu.au
Welcome to the School’s First Patrons and External Moderator

**Honorary Patron – Prof Andrew Prentice, Monash University**
Dr Andrew Prentice is an adjunct professor and planetary mathematician at Monash University. Andrew has spent four decades working on the Modern Laplacian theory of how the Solar System was formed some 4.5 billion years ago. Andrew likes to spend as much time as he can visiting school students to share his fascinating work and encouraging them to engage in mathematics and science at school.

**Patron – Dr Brad Carter, University of Southern Queensland**
Dr Brad Carter is a senior lecturer, astronomer and Director of USQ’s Mt Kent Observatory and leads a research team studying stellar astronomy and planetary systems. He has a genuine passion to share his expertise in astronomy with students and teachers through distance education. Brad says he was inspired to study science by his teachers at school which led him to become a professional astronomer.

**External Moderator (Assessment) – Prof Graeme L White, Charles Sturt University**
Dr Graeme L White is now an adjunct professor and lecturer at Charles Sturt University in Wagga Wagga. Prior to this, Graeme was the Director of Astronomy at James Cook University in Townsville, where he further developed his online courses in post-graduate astronomy and astrophysics. Graeme has kindly offered to be the school’s external moderator for quality assurance purposes for our Senior Astronomy and Senior Astrophysics courses.

**Spotlight on Elliot Coupe**
Elliot Coupe is a current high achieving Yr 11 student at Cairns State High School studying Senior Astronomy online. He plans to continue studying Senior Astrophysics online during 2014. Elliot has aspirations of studying engineering and astrophysics at university and would someday like to work in this field as a professional astronomer with an engineering background.

“In the past few weeks I’ve come to realise the true value of this course. It’s drastically helped me with my other three mathematics-based subjects (Maths B/C, Physics and in some parts, Chemistry) and it will definitely broaden my horizons for the future. I totally recommend these courses to others who have an interest in science and are serious about strengthening their mathematical skills”.

Elliot Coupe – 19 Oct 2013
Global Hands-On Universe (GHOU) Robotic Telescope — Close to Operational

One of our international partnerships is with the University of California, Berkeley USA. The university kindly gifted us a robotic 14” Schmidt-Cassegrain optical telescope on behalf of the Hands-On Universe project. James Cook University, Townsville also donated a dome to house the telescope in. The telescope will be operated by students via computers in a control room within our nearby auditorium.

We would like to thank and acknowledge the hard work and dedication of 12 high school students who installed the facility as a project for their TAFE Certificate II in Resources and Infrastructure course.

By mid-2014, we hope to have the telescope in full robotic operation for students across the globe to access via the internet. We also plan to have a 152 mm (6") dedicated solar refractor available to access data in H-Alpha, white light and Ca II k-line by this time also.

Curriculum Development Opportunity for Primary Teachers

We are collaborating with the University of California, Berkeley to develop astronomy-based units aligned to the Australian Curriculum for middle and junior school teachers to integrate into their mathematics and science lessons through the use of technology and modelling.

The first stage of this process allows for the opportunity for 15 primary school teachers from across Australia to participate in a 5-day Teacher Professional Development workshop scheduled for early July 2014. The workshop will be facilitated by highly trained Hands-On Universe (HOU) teachers from the US, and the participants will work closely with the facilitators to advise and provide feedback on what will work best in Australian classrooms.

The second stage is to establish a core task group of 5 teachers who will continue to work with Australian universities to develop the curriculum and resources for implementation into Australian schools. These teachers will also be trained as Australian HOU facilitators.

Interested teachers should make contact with the Head of School on 0427 445 296 or email learnastro@athertonshs.eq.edu.au to find out more about this unique opportunity.

Visit our website at https://learnastro.eq.edu.au
Graduate Students Encourage Study of Senior Astronomy & Astrophysics

“After studying the senior astronomy course in grade 10, the transition into senior Maths B and Physics was not as difficult as I expected and there was a vast difference in how other students were coping with the advancement in content and heavier workload. The subject also enriched my modelling and problem solving skills, especially in physics-related questions, but has been just as useful in understanding other procedures involved in advanced mathematics through an effective extension of all areas of maths as astronomy combines many aspects and actually puts them into practice.

The opportunities that have been presented to those who have taken the Astronomy and Astrophysics subjects have been once in a lifetime experiences. For example, we had the opportunity to take a field trip into outback FNQ and research the optimum location for viewing the total solar eclipse in November 2012 as well as the chance to travel to Charters Towers and be a part of aligning Blackheath and Thornburgh College’s telescope. The courses have also provided the opportunity to work with professional astronomers. We had the pleasure of working with the former Director of Astronomy at JCU Townsville on a number of occasions.

I've thoroughly enjoyed my two years studying the Senior Astronomy and Astrophysics subjects while at Atherton SHS and have certainly reaped the benefits in all of my maths and science subjects. I would recommend the course to anyone with a strong interest in maths and science, especially if they are interested in extending their knowledge and learning advanced maths and science skills”.

James Sellars, Current 2nd Year Medical Student.

“We studied the science and mathematical applications in astronomy and astrophysics for 2 years and found the courses to be extremely beneficial both as a head-start in Maths B and Physics topics and as an extension for modelling and problem solving skills. Senior Astronomy and Senior Astrophysics has not only extending my knowledge of maths and physics concepts but also provided a real life appreciation for the application of the concepts”.

Sam Phipps, Current 1st Year Engineering Student.

For more information on “The School of Astronomy and Astrophysics”, student enrolment or anything of interest in this newsletter, please don’t hesitate to contact our Head of School, Mr David Platz on:

Ph: 0427 445 296

Email: dplat4@eq.edu.au

or visit our website https://learnastro.eq.edu.au