Launch of National Science Week at KIOSC

Speech notes

Vice-Chancellor Professor Linda Kristjanson

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Deputy Premier and Minister for Education the Honourable James Merlino

The Honourable Heidi Victoria MP - Member for Bayswater District

Mayor of Knox, Mr Peter Lockwood and his fellow councillors

The KIOSC Consortium school principals, teachers and students

Swinburne colleagues

to all of you, welcome

It is a great pleasure to welcome you here today to the Knox Innovation, Opportunity and Sustainability Centre – or KIOSC as we know it.

This multi-purpose facility is supported by the City of Knox and is the product of a unique partnership between Swinburne and the Knox Consortium of Schools:

- Bayswater Secondary College
- Boronia K-12 College
- Fairhills High School
- Rowville Secondary College
- Scoresby Secondary College, and
- Wantirna College

This high-tech learning centre provides a wonderful opportunity to bring together education and the community to support the economic development of the region.

It offers a range of technology-rich collaborative areas, a presentation space and several laboratories, providing students with practical and innovative learning experiences, linking them with industry groups, government agencies and the local community.

This centre is giving young people in the Knox area an opportunity to acquire valuable skills as they go through secondary school.

Importantly, it also gives them a taste for post-secondary education, whether that’s a trade, a vocational qualification or university study.

The programs at KIOSC are designed to:

- connect students to a sustainable productive future
- improve their scientific literacy and critical thinking skills, and
- raise their aspirations for their own futures.
A key objective of KIOSC is to give students a realistic insight into the world of work so that they can make more informed decisions about their future, build their skills for employment and improve their career prospects.

Another objective is to increase student participation in STEM related subjects – science, technology, engineering and mathematics – throughout their secondary schooling and on to university.

The future of the world will be shaped by these disciplines that provide the skills and knowledge that underpin a technologically based workforce.

A report by the Australian Industry group published earlier this year highlighted the need to increase STEM skills in Australia.

In the school system and the tertiary education sector, participation in STEM-related disciplines is in decline.

Participation is also low in the VET sector in all STEM areas – except engineering.

We need a greater focus on developing engaging curriculum.

Together with industry we need to co-ordinate efforts to increase participation in education.

At Swinburne we are working to build awareness of STEM skills amongst schools and students:

- our university students visit schools through the In2Science program, working with teachers to act as role models and support the engaging teaching of science.
- our staff also visit schools through CSIRO’s Scientists and Mathematicians in Schools program to share their knowledge and their passion for science.
- secondary students also take part in our on-campus programs – this year we celebrated the 25,000th visitor to our 3D Astrotours presentation in the Virtual Reality Theatre during a visit from Year 8 students from a local school.
- and next month we will be hosting the Swinburne-ConocoPhillips Science Experience – a fun three days of science activities for Year 9 and 10 students.

A measure of how important science outreach is to Swinburne is the involvement of our most senior staff in these programs.

Australian Laureate Professor Matthew Bailes is taking a new experience to school students – where they use data from the Molonglo telescope in New South Wales to weigh and track stars that are billions of light years away.

Our new Dean of Science, Professor Sarah Maddison, is also a Swinburne leader in science outreach.
Her involvement is of particular importance because her example shows girls and young women that they too can aim for exciting and engaging careers in science.

This coming weekend, Professor Maddison is celebrating National Science Week by leading a group of astronomy online students and alumni to the Keck Observatory in Hawaii – look out for her selfies on Twitter!

At Swinburne we are deeply committed to equity and diversity in all areas, including the study of science, technology, engineering and maths.

As part of National Science Week, this year KIOSC will be hosting senior secondary students at the Careers of the Future event next Tuesday at the Caribbean Rollerama, showcasing design, information and communication technologies, engineering, science, health, gaming and animation.

From there, students will tour local businesses and experience first-hand how they shape our world through science, technology and innovation.

They will get an insight into possible future careers and courses, and also have some fun with robotics and digital technologies.

I am pleased to be able to tell you that this event is fully subscribed.

We are also hosting a ‘Careers of the Future’ expo for parents, teachers and students next Thursday.

This will include a presentation from social researcher, Mark McCrindle, followed by a panel discussion with academics and business leaders on how young people can best prepare for their futures.

I’d like to thank the Knox Council and local industries for supporting these events, demonstrating the importance of STEM skills, and giving young people the opportunity to venture into the world of industry.

Thank you.