



PROGRAM

Leading the Way

AISNSW Science Heads of Department Day 2022

Taronga Zoo

Friday 9 September 2022

Start Time: 8:30am for 9:00am

Finish Time: 3:30pm



8:30am-9:00am	REGISTRATION AND COFFEE				
9:00am-9:10am	Lecture Theatre	Welcome Acknowledgement of Country		Jennifer Woods Education Consultant: Teaching and Learning, AISNSW Ashley Mulcahy Senior Education Officer, Taronga Zoo	
9:10am-10:00am	Lecture Theatre	Keynote: Leading Learners: Instructional Leadership in Science		Glen Pearsall	
10:00am-10:45am	Lecture Theatre	Past and current Science students have their say. Activating Student Voice and Agency		Science Extension Student Panel Lois Cohen Moriah College	
10:45am-11:15am	MORNING TEA				
11:15am-12:15pm	SESSION A				
	Lecture Theatre	Seminar Room 1	Seminar Room 2	Habitat Room	
	Leading Pedagogical Change in Science Glen Pearsall	Data Informed Practice - A Toolkit for Heads of Department Dr Colin Harrison St Philip's Christian College, Port Stephens	Developing Leaders and the Role of Assistant Head of Department Melinda Mestre St Andrew's Cathedral School Mora Soliman De La Salle College Elizabeth Thrum Knox Grammar School	Depth Studies at Taronga Ashley Mulcahy Senior Education Officer, Taronga Zoo	
12:15pm-1:15pm	SESSION B				
	Lecture Theatre	Seminar Room 1	Seminar Room 2	Seminar Room 3	Science Lab
	Science Extension HSC Examination: Roundtable Discussion Michelle Cook St Paul's Grammar School Mora Soliman De La Salle College	Leading Your Team Using the APST: From Graduate to Lead Teacher and Beyond Glenda Chidrawi Consultant: Teacher Accreditation, AISNSW	Chemistry HSC Examination: Roundtable Discussion Melinda Mestre St Andrew's Cathedral School Dr Colin Harrison St Philip's Christian College, Port Stephens	Investigating Science HSC Examination: Roundtable Discussion Chris Chilton Arden Anglican College	Assessments and Rubrics in Science 7-12 Lois Cohen Angharad Thomas Moriah College
1:15pm-2:00pm	LUNCH				
2:00pm-3:00pm	SESSION C				
	Lecture Theatre	Seminar Room 1	Seminar Room 2	Seminar Room 3	
	Building Connections Between School and Industry Anna Lau Education Manager, Generation STEM, CSIRO Rob Hollow Education Manager, Space & Astronomy, CSIRO	Depth Studies: How do I build teacher capacity? Deborah De Ridder Trinity Grammar School Elizabeth Thrum Knox Grammar School	Physics HSC Examination: Roundtable Discussion Sandra Woodward Wenona School Matt Bentley St Ignatius College Riverview	Biology HSC Examination: Roundtable Discussion Julie Walsh Mount St Benedict College	
3:00pm	Lecture Theatre	CLOSE AND EVALUATIONS			



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Leading Learners: Instructional Leadership in Science

Glen Pearsall

Leading a Science Department is a challenging role that asks us to juggle a whole series of responsibilities and administrative demands. Sometimes our core role – leading learning – can be undermined by the sheer number of all the other duties we need to fulfil. This keynote explores how we can better target our efforts, ensuring that a focus on the learning of students and teachers is at the centre of everything we do. The address discusses practical strategies for maximising the impact of our team, techniques for supporting and challenging teachers and how we might employ the hypothesis model to drive school improvement.

Leading Pedagogical Change in Science

Glen Pearsall

Using questioning technique as a case study, this workshop explores how subtle adjustments to how your teachers conduct their lessons can have a profound effect on student engagement and outcomes. Emphasis will be given here to the everyday challenges of discussion in science: offering strategies for helping students reluctant to answer questions or who offer incorrect responses, dealing with interruptions, eliciting more detailed answers and addressing students who dominate class discussion. These practical, easy-to-use strategies will underline the key idea: that the best way for busy teachers to navigate the avalanche of advice they receive on how to optimise their teaching - is to focus your team's attention on the few skills that matter most.

Data Informed Practice - A Toolkit for Heads of Department

Dr Col Harrison

Data driven education - it has become one of the buzz words for educational practice, but what data is useful and how do we collect and use it? In this workshop we talk through RAP HSC data and reporting (utilising Excel), Professional Learning SPLAC Sheets and goal setting, and linked cloud documents to keep your data organised and relevant.



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Developing Leaders and the Role of Assistant Heads of Department

Melinda Mestre and Mora Soliman

The developing leaders workshop is targeted at aspiring leaders and looks at how to develop as a leader and find opportunities to demonstrate leadership skills. There will be discussion about the different leadership styles and how these work to obtain the best from colleagues and line managers. We also examine the challenges of being an Assistant Head of Department and hope to provide strategies as to how to manage difficult situations being a middle leader.

Depth Studies at Taronga

Ashley Mulcahy

Taronga Zoo Sydney is an amazing resource that allows students to springboard their appreciation for the living world. Observation and understanding of the living world allows us to think about and appreciate our role in it, whether that be through conservation or learning more. Our two depth studies Observing Animal Behaviour (module 1 IS) and Wildlife at Risk (module 4 Bio) allow students to hear from scientists, Taronga educators and interact with some animals.

This session will also discuss future plans around non human disease for Biology, as well as Introduced species and Sustainability Action Plans for EES.

HSC Roundtable Discussions

Current teachers will facilitate each session

In this interactive session, hear from experienced HSC markers about strategies they recommend to lift students responses to examination questions. You will have the opportunity to ask questions, and to offer what works for your students.

Leading Your Team Using the Australian Professional Standards for Teachers: From Graduate to Lead Teacher and Beyond

Glenda Chidwari

What is expected of teachers at the different career stages? How do I lead and support my teachers? Heads of Department have an important role in leading the professional growth of their staff. Key to this is developing a practical understanding and recognition of the expectations of teachers at different career stages, as described in the Australian Professional Standards for Teachers (APST).



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Assessments and Rubrics in Science 7-12

Lois Cohen and Angharad Thomas

Are you confused with rubrics that are asking for an 'extensive' or 'sound' understanding?

How do we measure growth when assessing Working Scientifically skills in a rubric?

By starting to develop a skills continuum from stage 4 to stage 6, we will be unpacking the Working Scientifically skills that students need to build on in the earlier stages to prepare them for the outcomes of stage 6 Science.

Using verbs to write effective rubric descriptors, we will take out the guess work of what the students need to showcase when working scientifically that is appropriate to their stage level.

Building Connections Between School and Industry

Anna Lau and Rob Hollow

To lift Australia's capacity and capability in STEM and inspire the future workforce, CSIRO Education and Outreach develops and delivers programs that build essential STEM skills among school-aged students, teachers and the community. In delivering these programs CSIRO connects schools and industry to bring real world STEM into the classroom.

Depth Studies: How do I build teacher capacity?

Deborah De Ridder and Elizabeth Thrum

Depth Studies allow the opportunity in the Stage 6 syllabuses for students to engage in Inquiry-Based Learning (IBL). The question that Heads of Department often raise is "how do we develop teacher capacity in IBL pedagogies in a crowded curriculum?" This interactive workshop initially reports on recent research relating to the NSW Depth Studies and the practices of teachers in who adopt a guided Inquiry-Based Learning approach. The workshop focuses on two findings from this study which could be adapted for staff development during the planning of the Depth Study. These include developing a process for IBL and teacher "talk" during the Depth Study, which according to the students in this study, was an important feature of their teachers' practice. A school example of where a Head of Department has developed staff capacity in IBL pedagogies is also presented. There will be opportunity to consider and discuss these practices and share ideas during the workshop.