



**SCIENCE AND MATHS
LEARNING AND TEACHING FORUM**

**FLINDERS UNIVERSITY
12 AND 13 NOVEMBER 2009**

PROGRAM

Aim

The Science and Maths Learning and Teaching Forum aims to provide an opportunity for colleagues to share information and ideas; discuss key development areas for students; and provide the opportunity to develop collaborative practice, and educational research interest across member universities and other stakeholders.

This aim is to be realised through a number of distinct purposes. These are, for participants to:

- ◇ engage in processes of sharing good practice;
- ◇ advance educational growth through the consideration of different teaching practices;
- ◇ identify key collaborative educational research interests with member universities and other stakeholders;
- ◇ develop specific educational research interest groups;
- ◇ plan for how the member universities might collaboratively engage in advancing effective teaching and learning practices

Learning Collaboration Opportunity

*Charles Darwin University, Flinders University, Griffith University,
James Cook University, La Trobe University, Murdoch University, The University of Newcastle*

DAY ONE—SPEAKERS AND SHOWCASES

9:30am	Dr Leone Maddox <i>Flinders University</i>	
9:40am	Prof Andrew Parkin <i>DVCA Flinders University</i>	<i>Welcome and Open of the Forum</i>
9:55am	Keynote Address: Dr Jim Peacock <i>CSIRO</i>	<i>Scientists and Mathematicians in Schools Program</i>
10:50am	<i>MORNING TEA</i>	
11:10am	Ms Karen Burke da Silva <i>Flinders University</i>	<i>Scientists Leading Scientists: Raising the profile of teaching</i>
11:30am	IRU Maths and Physics Course Collaboration Group	<i>Report on Course Collaboration</i>
11:50am		<i>Discussion on course collaboration. (May include experiences from other course collaboration)</i>
12:10pm	A/Prof Heather Smigiel <i>Flinders University</i>	<i>Writing successful ALTC applications in the maths/science domain.</i>
12:30pm	<i>LUNCH</i>	
1:15pm	A/Prof Jamie Quinton & Dr Chris Creagh <i>Flinders University</i> <i>Murdoch University</i>	<i>Physics engagement</i>
1:45pm	Ms Jayne Heath and Dr Neil Davis <i>Australian Science and Maths School</i>	<i>The Australian Science and Maths School</i>
2:05pm	Ms Yolanda Pereira <i>Murdoch University</i>	<i>Star Mentor Program, Engagement</i>
2:25pm	Dr Darius Pfitzner <i>Flinders University</i>	<i>Communications Officer, Engagement</i>
2:45pm	<i>AFTERNOON TEA</i>	
3:00pm	Prof Peter Sullivan <i>Monash University</i>	<i>Maths National Curriculum</i>
3:30pm	Prof Phil Broadbridge <i>La Trobe University</i>	<i>AMSI's perspective on the national curriculum</i>
4:00pm	Mr Jim Davies and Mrs Lyn Jefferies <i>Australian Science and Mathematics School</i>	<i>Science National Curriculum</i>
4:30pm	Panel Discussion	
4:45pm	Close	<i>Buses depart 5:00pm for dinner venue</i>
7:00pm	Pre- dinner drinks and dinner.	Dinner speaker: Prof Michael Barber <i>Vice Chancellor Flinders University</i>

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DAY TWO—CREATING THE SPARKLE: ENGAGEMENT AND SUPPORT

Workshop Aims

- ◇ sharing of practice;
- ◇ how this fits across the IRU group
- ◇ developing an agenda for moving forward

9:00am	Ms Lenore Cooper <i>IRU Director</i>	<i>IRU update and identifying areas for future collaboration</i>
9:30am <i>(morning tea included)</i>	Workshop 1: Peer to Peer Interaction to support learning Ms Yolanda Pereira (<i>Murdoch University</i>) & Dr Jeanne Young (<i>Flinders University</i>) <ul style="list-style-type: none"> • Types of peer interaction and what they are commonly used to achieve • Implementing peer to peer learning 	
	Workshop 2: Improving Scientific Inquiry in the Laboratory Ms Karen Burke da Silva (<i>Flinders University</i>) Dr Andrew Kepert (<i>The University of Newcastle</i>) <ul style="list-style-type: none"> • Information about ASELL • Designing and assessing laboratories in science • Sharing of resources • Can this stretch to Maths? 	
	Workshop 3: Diagnosis and Support Dr Kristina Constantopoulos (<i>Flinders University</i>) Dr Claire Lenehan (<i>Flinders University</i>) <ul style="list-style-type: none"> • Identification of academic skills • Developing Key competencies • Building writing and mathematical skills • Online support – pooled electronic offerings (online lectures, practicals, "just in time" support, bank of walk throughs e.g. livescribe) 	
11:30am	Report workshop outcomes by facilitators	
12:00noon	LUNCH	

Afternoon workshops continue over page

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Afternoon workshops continue

12:45pm	<p>Workshop 4: Learning as Inquiry Mr Stephen Thornton (<i>Charles Darwin University</i>) Mr Barry Kissane (<i>Murdoch University</i>) Dr Elizabeth Johnson (<i>La Trobe University</i>)</p> <ul style="list-style-type: none">• Developing scientific inquiry and mathematical literacy• Undergraduate research options• Graduate qualities• Development of scientific and non-scientific skills• Online support, resources and assessment
	<p>Workshop 5: Scholarship in Scientific Learning and Teaching Dr Tiffany Winn (<i>Flinders University</i>) Dr Jeannette Fyffe (<i>La Trobe University</i>)</p> <ul style="list-style-type: none">• Raising the profile of teaching in science through scholarship• Accessing ALTC and other funding bodies• Idea: Creation of a quiz/survey for all students in 1st yr across the IRU to complete to gain a picture of the understandings of concepts that students bring to university. May also gain a picture of the different education systems
	<p>Workshop 6: Crossing the boundaries. Dr Chris Creagh (<i>Murdoch University</i>) Dr Ian Roberts (<i>Charles Darwin University</i>)</p> <ul style="list-style-type: none">• Working with schools –reaching deeper• Linking with schools to build and understand national and local curricula• Working with the community• Working with scientists
2:45pm	<i>AFTERNOON TEA</i>
3:00pm	Report of workshop outcomes by facilitators.
3:30pm	The way forward
4:00pm	Forum Close

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