





MASTERCLASS AND EXPERTISE DEVELOPMENT PROGRAM – TERM 4, WEEK 5

Time	Outline	Presenter Bio
8:30am	Arrival and Registration	
9:00am	The nature of scientific inquiry	<p>Peter Ellerton lectures at the University of Queensland in Critical Thinking and is the founding Director of the University of Queensland Critical Thinking Project. He is also a philosopher and science educator.</p>  <p>Peter is a former Head of Experimental Sciences at the Queensland Academy of Science, Mathematics and Technology offering the International Baccalaureate program. He is also an advisor to the International Baccalaureate Organisation on the development of the new Nature of Science subject (now in pilot world-wide) and has advised on the structure of all the new science syllabus materials. Peter is currently working with the European Commission Joint research Centre on the public understanding of science.</p> <p>Peter is a QCAA State Panel member, is Chief Examiner for External Physics and was lead writer for the 2019 Philosophy and Reason Syllabus.</p>
	<p>What is it that separates science from other disciplines? How do we talk to students about science and why should they think scientific knowledge is privileged above other kinds of knowledge? What does this mean for us pedagogically?</p> <p>Teaching STEM (or even STEAM) is more than just delivering concepts and experiences. It's also about developing in students a profound understanding of how science links in with other areas of human endeavour. This dimension of what it means to be 'scientifically literate' is less of an educational focus than it could (should) be. This masterclass will provide ways of bringing these ideas into mainstream science classes to enrich student experiences and provide more incentive for students to sustain a STEM focus academically.</p>	
10:30am	Morning Tea	
11:00am	Critical thinking in science and mathematics	
	<p>Continuing on from the themes above, this session will discuss in detail what it means to think critically in science and mathematics and provide a means for teachers to audit their learning experiences and assessment in STEM for cognitions related to syllabus requirements.</p>	
1:00pm	Lunch	
1:30pm	Shared STEM Practice: Members	 <p>Don't be shy! Please don't feel as though your experiences are not significant— from simple ideas very powerful teaching and learning can occur!</p>
	<p>Members are invited to share their experiences and thinking in implementing 'teaching for thinking' in STEM subjects and activities or development of teaching for thinking across your faculty or school. You can discuss whatever you think has been useful and do so in a few minutes or longer, including demonstrating any techniques you have used or resources you have developed.</p> <p>NB: Email Glen to nominate or to find out more gwatt5@eq.edu.au.</p>	
2:30–3:00pm	Closing comments, forward planning and departure.	

Date and Venue	General Details
<ul style="list-style-type: none"> Date: Monday 5 November Venue: University of Qld Register here – by Wednesday 31 October. 	<ul style="list-style-type: none"> <i>Aspiring Thinkers</i> can attend free of charge. Non-members from your school can also attend free of charge. Morning tea and lunch will be provided. Bring personal items and a laptop/device.
NB: There may be a cost to your school in terms of TRS and travel/accommodation.	