



## 2008 AGTA/STIS Conference Program

Pre- conference tour Saturday September 27 – Sunday September 28

**Fraser Island — Delegate's special ( \*\*\*Partners included \*\*\*\* )**

**One Night Only — Delegates \$80 Partners \$150**

This will be an unforgettable two-day tour. Delegates will be transported from the Sunshine Coast to the island, lunch at Central Station, visit Lake Birrabeen, then back to the accommodation for dinner (BBQ). On day two breakfast followed by a walk into Lake Wabby, collection at 12.30pm, lunch and then return to Sunshine Coast by 4.30pm.

The tour is being operated by new company Trailblazers as an introductory special for Geography teachers.





## Monday 29<sup>th</sup> September

8:00 -8.45am Registration, Coffee and Trade Displays

8:45-9:00am **Welcome and Opening Address** - Nick Hutchinson, President of AGTA and Anne-Marie Gerlach, President of GTAQ

9.00-10.00am **Keynote Presentation: GIS in the Classroom - Opportunities and Challenges by Derek Milton**

10.00-10.30am Morning tea

10:30-12:30 **Session 1 Electives**

Elective 1.1	Elective 1.2	Elective 1.3	Elective 1.4	Elective 1.5	Elective 1.6	Elective 1.7	Elective 1.8
Using GIS to study Science and Physical Geography	Introduction to GIS ArcView 9x	Virtual Field Trips and Spatial Technologies in Asian Studies	My World – A student focussed GIS resource	a) Welcome to Dingo Creek – Emergency Management (1 hour)	a) The role of Geography in the Essential Learnings (1 hour)	The Le@rning Federation’s free digital content for teaching and learning Geography	Introduction to GPS & Linking GPS to GIS
Malcolm McInerney	Mick Law	Sally Vellar	Bob Rodgers	Melanie Ashby & Katrina Beard	Terry Gallagher		
				b) Geoscience Australia- Hazards and more (1 hour)	b) Essential Learnings – a way forward (1 hour)		Neil Gray
				Shona Blewett	Maggie King, Lyn Thane and Anne-Marie Gerlach		



12.30 – 1.30pm Lunch

1:30 – 3.30pm **Session 2 Electives**

Elective 2.1	Elective 2.2	Elective 2.3	Elective 2.4	Elective 2.5	Elective 2.6	Elective 2.7	Elective 2.8
Antarctica and Planet Earth	Introduction to GIS ArcView 9x	Creating 3D Spatial Models using Google Sketchup	Getting the data right - Sourcing spatial data from local government	a) The Murray Darling Basin: Using IT to enhance Geography (1 hour)	a) Misconceptions and Pedagogy in Geography (1 hour)	The Le@rning Federation's free digital content for teaching and learning Geography	Geocaching - the modern treasure hunt
Nick Cutajar	Mick Law	Rod Prior	Susie Kempson	Franco Smargiassi	Rod Lane		
				b) Welcome to Dingo Creek – Emergency Management (1 hour) Melanie Ashby & Katrina Beard	b) 'Fundamentals of Mapping' (1 hour) Russell Priebbenow		

3:30-3.50pm **Showcase Australia and the World –Spatial Technologies in Schools Projects**  
*Presented by Malcolm McInerney, Recipient of the 2007 Churchill Scholarship*

3:50-4pm **Debrief and Close**

**Evening – Barefoot Bowls and BBQ**



## Tuesday 30<sup>th</sup> September

8:00-9:00 Registration, Coffee, Trade Displays

9:00-11:00am **Session 3 Electives**

Elective 3.1	Elective 3.2	Elective 3.3	Elective 3.4	Elective 3.5	Elective 3.6	Elective 3.7	Elective 3.8
"Accessing and Spatially Representing Demographic Data"	Urban Renewal or Urban Sprawl: Which is more sustainable? Online GIS for teaching planning concepts in Senior Geography	Virtual Field Trips and Spatial Technologies in Asian Studies	GIS in Asset Management : <i>Creating Custom Layers in ArcGIS</i>	Making the most of MiLK Harnessing the contemporary culture and interests of natural born cyborgs	Geocaching - The Modern Treasure Hunt	a) Engaging Young Australians with Asia (1 Hour)  Marcia Rouen	Introduction to GPS & Linking GPS to GIS  Neil Gray
Pat Beeson & Ken Melchert	Brett Dascombe	Sally Vellar	Rod Prior	Debra Polson & Colleen Morgan	Alan Brummel	b) Developing GIS skills (1 hour)  Mick Law	

11:00-11:30am – Morning Tea

11:30-12:30pm **“Get Real” – Real world case studies, career and tertiary pathway opportunities for students**  
*Presented by the Spatial Science Young Professionals*  
 ESRI MAJOR PRIZE DRAW will take place at the end of this session.

12:30-1:30pm - Lunch



**Tuesday**  
1:30-3:30 **Session 4 Electives**

Elective 4.1	Elective 4.2	Elective 4.3	Elective 4.4	Elective 4.5	Elective 4.6	Elective 4.7	Elective 4.8
"Accessing and Spatially Representing Demographic Data"  Pat Beeson & Ken Melchert	GIS in asset management : <i>Creating Custom Layers in ArcGIS</i>  Mick Law	Eduspace: European Space Agency portal  Sally Vellar	Creating 3D Spatial Models using Google Sketchup  Rod Prior	a) Picture Queensland: Images for learning  Gavin Bannerman	a) Climate Change, Energy and Low Emission Technologies (1 hour)  Dr. Kelly Thambimuthu	a) Understanding Climate Change (1 Hour)  Andrew Zuch	The Le@rning Federation's free digital content for teaching and learning Geography  Olivia Clarke
				b) Unleashing student creativity to respond to climate change risk (1 Hour)  Dr Douglas Bardsley	b) Solaris – Retrofitted Solar Power Home (1 Hour)  Trevor Berrill	b) Geoscience Australia – Hazards and more (1 Hour)  Shona Blewett	

**3:30-4:00pm Keynote Address: 'A case study: Spatial technologies aide students in saving the local environment' Neil Gray**



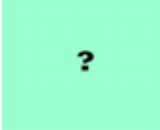

Neil will be sharing his experiences in supporting Boonah State School using spatial technologies in a biological control release project involving the cats claw creeper and tingid lacewing in the Fassifern Region of South East Queensland. The school worked in conjunction with the Maroon Outdoor Education centre, local agencies and community members to record data that was used to generate the map based products used to report on the position of the release and the status of active colonies. This process is now ongoing.

**4:00-4:15pm Debrief and Close**

**Evening** – At leisure or at RGSQ "Geography in the 21<sup>st</sup> Century: a National Curriculum for Australia" forum Rydges Oasis Resort 7.30pm RSVP: [admin@rgsq.org.au](mailto:admin@rgsq.org.au) for catering - pizzas and drinks provided



**Wednesday 1<sup>st</sup> October – Field Trips &**

Field Trip	Field Trip Leader	Description	
<p><b>FT1</b> <b>Why Noosa?</b></p>	Sally Vellar		Find out why Noosa is one of the Sunshine Coast's most popular destinations and why the shire has been fighting strongly to preserve its identity.
<p><b>FT2</b> <b>The Glasshouse Mountains</b></p>	Kay Channon and Doug Hoare		Aboriginal legend has it that the Glasshouse Mountains will once again become an active volcanic area. Find out more about this fascinating legend as well as walk in the rainforests of the Maleny plateau.
<p><b>FT3</b> <b>Geocaching on the Sunshine Coast</b></p>	Alan Brummell		If you like the "National Treasure" movies, and always wanted to find your own 'treasures' on the Sunshine Coast, then you will love this trip introducing geocaching and GPS use
<p><b>FT4</b> <b>Protecting Cooloola</b></p>	David Lergessner		Didn't get enough sand at Fraser Island? Join this run through the Cooloola National Park with one of the geography teachers closely involved in the exercise which resulted in the closing of this area to sand mining and the opening of it to tourism!

**EVENING – CONFERENCE DINNER – VELVET WATERS –**  
**Including AGTA AWARD PRESENTATION**



## Thursday 2<sup>nd</sup> October

8:00 – 9:00am Registration, Coffee, Trade Displays

9:00 – 10:00am **Keynote Address: Earth, Maps, and Mashups - Google in the Geography Classroom by Raul Vera**

10 – 10:30am – Morning Tea

10:30-12:30pm **Session 5 Electives**

Elective 5.1	Elective 5.2	Elective 5.3	Elective 5.4	Elective 5.5	Elective 5.6	Elective 5.7
a) Fieldwork Journeys (Aust & Europe) (1 Hour)  Mark Manuel	Spatial Technologies without spending money!  Rebecca Nicholas	Urban Renewal or Urban Sprawl: Which is more sustainable? Online GIS for teaching planning concepts in Senior Geography  Brett Dascombe	Profiling a geographical area  Ross Johnson	a) Unleashing student creativity to respond to climate change risk (1 Hour)  Dr Douglas Bardsley	a) Social Justice and Global Citizenship (1 Hour)  Rod Yule	a) Using visual texts to enhance students conceptual understanding of Geography (1 Hour)  Grant Kleeman
b) Planet of Slums (1 Hour)  Stephen Cranby				b) Coastal Management and effective use of DVDs in the classroom (1 Hour)  Steve Weingarh	b) Fundamentals of Renewable Energy Technologies (1 Hour)  Wendy Miller	b) Developing Young Geographers (1 Hour)  Jeana Kriewaldt

12:30-1:30pm - Lunch



**Thursday**  
1:30-3:30pm **Session 6 Electives**

Elective 6.1	Elective 6.2	Elective 6.3	Elective 6.4	Elective 6.5	Elective 6.6	Elective 6.7
a) Fieldwork Journeys (Aust & Europe) (1 Hour)  Mark Manuel	a) Urban development - Using IT to enhance Geography  Franco Smargiassi	Resource Use and the Environment  Rebecca Nicholas and Anne-Marie Gerlach	a) Population, Resources & Development – curriculum showcase (1 Hour)  Tim Agnew	a) Planning as awesome (1 hour)  Kate Isles	a) Social Justice and Global Citizenship (1 Hour)  Rod Yule	a) Fundamentals of Renewable Energy Technologies (1 Hour)  Wendy Miller
b) Planet of Slums (1 Hour)  Stephen Cranby	b) The Murray Darling Basin: Using IT to enhance Geography (1 Hour)  Franco Smargiassi		b) Teaching Geography with a teddy bear (1 hour)  David Lergessner	b) Coastal Management and effective use of DVDs in the classroom (1 Hour)  Steve Weingarh	b) A Plague on all our houses – exploring the Geography of Disease (1 Hour)  Hilary Macleod	b) Developing Geography Teaching Standards (1 Hour)  Jeana Kriewaldt and Nick Hutchison

3:30-4:00pm **National Panel – The State of Geography Across Australia** – *Facilitated by Nick Hutchinson, AGTA Chair*

4:00-4:15pm **Debrief and Close of CONFERENCE**





ICT Learning Innovation Centre

Supporting Smart Classrooms

## Post-conference tour Friday October 3 – Saturday October 4

### Fraser Island — Delegate's special ( partners included \$150 )

**One Night Only — Delegates \$80 Partners \$150**

This will be an unforgettable two-day tour. Delegates will be transported from the Sunshine Coast to the island, lunch at Central Station, visit Lake Birrabeen, then back to the accommodation for dinner (BBQ). On day two breakfast, a walk into Lake Wabby, collection at 12.30pm, lunch and then return to Sunshine Coast by 4.30pm.

The tour is being operated by new company Trailblazers as an introductory special for Geography teachers.





## **ABSTRACTS**

### **Session 1 Electives**

#### **1.1 Using GIS to study Science and Physical Geography**

**Type: Workshop**

The workshop will explore the use of GIS in the study of science and physical geography by a variety of investigative questions relating to earthquakes, water quality, micro-climates, underground water, greening, geomorphology and mineral deposits. The Australian Geoscience data available will be showcased and used in all the presented GIS practicals and activities. The workshop is suitable for the GIS beginner and introduces teachers to the range of activities available to invigorate the teaching of physical geography and the physical sciences in the classroom.

**Presenter: Malcolm McInerney, Dept of Education and Children's Services, South Australia.**

#### **1.2 Introduction to ArcGIS: ArcView 9x**

**Type: Workshop**

ArcView 9x is the latest version of ESRI ArcView technology. Curriculum resources available are constantly emerging, and ESRI's "Mapping Our World" for ArcView 9x is now available. Using this industry standard technology, participants will be introduced to the possibilities of GIS and build skills in using this software.

**Presenter: Mick Law, Contour Education REPEATED as Elective 2.2**

#### **1.3 Virtual Field Trips and Spatial Technologies in Asian Studies**

**Type: Demonstration / Workshop**

With a range of 3D spatial technologies now available for free download, and others at cost, you can now explore your world in a virtual environment. Virtual field trips allow for a wealth of understanding of places anywhere in the world, whether for studying your local area, Asian studies or global investigations. This workshop will demonstrate and allow hands on access to virtual 3D technologies such as GeoFlight, Google Earth, NASA World Wind and Microsoft's Flight Simulator, focusing on Australian and Asian studies and tours. Why Asia? Studies of Asia and Australia's engagement with Asia are being included in course content across the curriculum.

**Presenter: Sally Vellar, teacher, Coolum State High School REPEATED as Elective 3.3**



#### **1.4 My World – A Student Focussed GIS Resource**

**Type: Workshop**

MyWorld is a GIS program specifically designed for use in schools and universities unlike ArcGIS which was designed for commercial purposes. ESRI has been involved at some level in the development of MyWorld as the program is "Powered by ESRI". It can use the same datasets as ArcGIS as well as being able to pull data in from Pasco GLX dataloggers and sensors (including the new GPS sensor). It has been successfully used with students from Year 5 up to Year 12. And finally it is being developed for both Mac OSX and Windows unlike many other GIS options.

**Presenter: Bob Rodgers, HOD - Information Technology, Windaroo Valley High**

#### **1.5a Welcome to Dingo Creek - An innovative learning object to immerse middle year students in natural disaster education in an Australian context**

**Type: Workshop**

Dingo Creek (a fictitious Australian town) is a learning object to engage students in the process of identifying risks from natural disasters to their immediate community; and interrogating the emergency risk management process to mitigate the impacts of natural disaster on the Australian environment. Concisely mapped to state and territory curriculum frameworks, Dingo Creek is supported by both an extensive Teaching Manual and 8 off-line lesson plans. The off-line activities provide opportunity for students to raise awareness of local risks of natural disaster, emergency risk management process and aims to enhance community resilience to the effects of natural disaster.

**Presenters: Melanie Ashby (Manager - School Education) & Katrina Beard (Manager - E-learning) Attorney-General's Department - Emergency Management Australia REPEATED as Elective 2.5b**

#### **1.5b Geoscience Australia – Hazards and more**

**Type: Presentation**

Geoscience Australia is teeming with geography related activities such as the Australian Tsunami Warning System, hazard risk assessment, satellite imagery, mapping and geothermal energy research. This workshop will provide teachers with up-to-date information on these topics, consider teaching methods and showcase on-line resources including MapConnect, Sentinel (bushfire monitoring) and new natural hazards pages.

**Presenter: Shona Blewett, Geoscience Australia REPEATED as Elective 4.7b**



## 1.6a The Role of Geography in the Essential Learnings

### Type: Presentation

This workshop will introduce the recently released Queensland Curriculum Assessment and Reporting (QCAR) Framework. The focus of the session will be the Essential Learnings and their role in assisting teachers to plan and assess the important knowledge and understanding, and ways of working in the Geography and the broader key learning area of Studies of Society and Environment. Participants will have the opportunity to explore the Essential Learnings and Standards and discuss curriculum planning and professional development issues.

**Presenter: Terry Gallagher, Queensland Studies Authority**

## 1.6b Essential Learnings – a way forward

### Type: Presentation

Building on Terry Gallagher's introduction to the QCAR Framework, this session will provide specific guidance on developing units of work to cover the 'knowledge and understanding' and 'ways of working' requirements of the Essential Learnings package. Anne-Marie Gerlach, Lyn Thane and Maggie King will look at sample content across a range of key junior geography topics, and demonstrate some of the new resources available to help teachers implement the Essential Learnings successfully.

**Maggie Kerr, Lyn Thane and Anne-Marie Gerlach**

## 1.7 The Le@rning Federation's free digital content for teaching and learning Geography

The Le@rning Federation (TLF), the all-government initiative which makes available free digital curriculum materials to schools, has a wealth of resources which can be used by geography teachers to create exciting and challenging learning tasks for students.

Olivia will demonstrate some of the hundreds of interactive learning objects, maps, photos, film clips and tools that are readily available to both primary and secondary teachers. The presentation will also consider ways in which these multimodal resources can be used to extend and enhance a range of concepts, themes and topics covered across different year levels in Geography.

**Presenter: Olivia Clark REPEATED as Elective 2.7**

## 1.8 Introduction to GPS and linking GPS to GIS

### Type: Field Activity

Using a GPS (Global Positioning System) allows you to capture location information relevant to your curriculum around the school or during field trips. Importing this information into GIS will display the information geographically for analysis. This field activity will introduce the basic fundamentals of using a GPS, allow hands on use and data capture, and then download the information into GIS.

**Presenter: Neil Gray, Senior Teacher, Maroon Outdoor Education Centre REPEATED as Elective 3.8**



## Session 2 Electives

### 2.1 Antarctica and Planet Earth

#### Type: Workshop

This computer-lab based hands-on workshop is intended to explore online projects that specifically target SOSE education, in particular Geography. Teachers will have the opportunity to explore the many learning activities and projects available online at **edna's** Global Education website, online projects registered with OzProjects as well as those hosted in the OzProjects in the virtual learning environment - Moodle. On-line projects include Antarctica and Planet Earth.

**Presenter: Nick Cutajar**

### 2.2 Introduction to ArcGIS: ArcView 9x

#### Repeat of Elective 1.2

**Presenter: Mick Law, Contour Education**

### 2.3 Creating 3D Spatial Models Using Google SketchUp

#### Type: Workshop

This session show participants how to develop 3D models using Google Sketchup that can be scaled to size and exported back to Google to complete 3D Maps. This is a great tool for engaging students in spatial technology and has some exciting possibilities within curriculum.

**Presenter: Rod Prior, Harristown State High School REPEATED as Elective 4.4**

### 2.4 Getting the data right - Sourcing spatial data from local government

#### Type : Presentation

For GIS technology to be successful you need the right data. Many schools fail to make in-roads when implementing GIS into their curriculum due to the lack of reliable base spatial data. The best source of data can be sourced from your local council . The presenter will give her top 10 do's and don'ts when dealing with local government for the supply of local data and go through some of the obstacles you might need to overcome once you have received this data. The workshop will also showcase the lessons developed by Bacchus Marsh Grammar in partnership with the City of Melbourne for the Docklands and the Kensington area of Melbourne.

**Presenter : Susie Kempson, Spatial Systems Team Leader, City of Melbourne**



## **2.5a The Murray Darling Basin: Using IT to enhance Geography**

### **Type: Workshop**

The MDB GIS resource, released late in 2006 and funded by the MDBC, was developed specifically for educational use. The activities & worksheets make it a complete teaching package. It has been very well received by those teachers that have acquired this useful, easy to use GIS resource. The resource can be used by the teacher alone with laptop/projector or in a computer lab. The module is used in conjunction with the Geotoolkit - GIS/Mapping software.. Franco will also be showcasing the latest in the Geotoolkit modules – Urban growth – Melbourne/Sydney/Perth. Approval copies of both will be available at the workshop

**Presenter: Franco Smargiassi, Compass EduMedia REPEATED as Elective 6.2b**

## **2.5b Welcome to Dingo Creek - An innovative learning object to immerse middle year students in natural disaster education in an Australian context**

### **Repeat of Elective 1.5a**

**Presenters: Melanie Ashby (Manager - School Education) & Katrina Beard (Manager - E-learning) Attorney-General's Department - EMA**

## **2.6a Misconceptions and Pedagogy in Geography**

### **Type: Presentation**

Students often bring to class a range of 'alternative frameworks' and 'naive theories' (constructed from prior experiences) that are inconsistent with currently accepted 'expert views'. Students develop their own understandings of 'how the world works' prior to receiving formal instruction and generate 'naive theories' or views of phenomena in an attempt to make sense of their every day experiences. This presentation examines some of the common misconceptions students bring to the study of Geography, the source of these and the strategies teachers can use to address them.

**Presenter: Rod Lane, Lecturer, Macquarie University**

## **2.6b 'Fundamentals of Mapping' and other resources available from ICSM.**

### **Type: Presentation**

The Intergovernmental Committee on Surveying & Mapping (ICSM) has developed a new web-based product to be called '[The Fundamentals of Mapping](#)'. This is designed to provide a comprehensive, but uncomplicated, overview of maps and mapping. Its primary design concept is that it has been written using plain English and is unashamedly Australian. The package also uses informative images and graphics to enhance learning and it includes numerous hyperlinks to websites which offer greater details on specific subjects.

**Presenter: Russell Priebbenow, Director, Survey Policy and Infrastructure, Queensland Dept. of Natural Resources & Water**



## **2.7: The Le@rning Federation's free digital content for teaching and learning Geography**

**Type: Presentation**

**Repeat of Elective 1.7**

**Presenter: Olivia Clarke**

## **2. 8 Geocaching – The Modern Treasure Hunt**

**Type: Field Activity**

Geocaching is an entertaining adventure game that uses global positioning system (GPS) technology to locate caches placed by geocaching enthusiasts in interesting locations around the world. Great for building skills and understanding of coordinates and navigation, geocaching can be used as an active, outdoors learning experience in a range of curriculum areas. This field activity will give participants hands on experience with GPS while competing to find the hidden treasure.

**Presenter: Alan Brummel, Chancellor State College REPEATED as Elective 3.6**

## **Session 3 Electives**

### **3.1 Accessing and Spatially Representing Demographic Data**

**Type: demonstration / workshop**

This workshop will introduce participants to the 2006 Census Products, such as QuickStats, Census Tables and MapStats, which are now available free on-line. An outline will be provided of forthcoming products, such as CData Online and SEIFA and how they may be developed using GIS. Accessing OESR products and tools will be explained and how they may be used to develop thematic maps. Integrating data from QRSIS into ARCGIS will also be covered.

**Presenter: Pat Beeson, ABS Education Services, Australian Bureau of Statistics and Ken Melchert, Office of Economic and Statistical Research REPEATED as Elective 4.1**

### **3.2 Urban Renewal or Urban Sprawl: Which is more sustainable? Online GIS for teaching planning concepts in Senior Geography**

**Type: Presentation**

Using a combination of technologies including Google maps, Brisbane City Council data, Historical photos from an online repository, photos taken this year and even Carbon Dioxide data collected onsite, complex maps will be created and some analysis of planning can be achieved. ArcGIS for schools, free ArcView Explorer and Google maps will be utilised with a range of data. It will also highlight how Learning Place Blackboard has been used to enhance teaching and learning in this subject.

**Presenter: Brett Dascombe, Wavell State High School REPEATED as Elective 5.3**



### **3.3 Virtual Field Trips and Spatial Technologies in Asian Studies**

**Type: Demonstration / Workshop**

**Repeat of Elective 1.3**

**Presenter: Sally Vellar, Coolum State High School**

### **3.4 GIS in Asset Management: Creating Custom Layers in ArcGIS**

**Type: Workshop**

With access to aerial photography through many local councils, you can use GIS to create data and map your school to manage assets, plan sports carnivals, assess evacuation routes and address health and safety issues. Some schools use this data for students to address school based issues such as litter and sun protection. By using spatial imagery, either from Google Earth or aerial photography, it is a simple task to add custom data layers that enables you to pinpoint locations and add data to them. This is extremely useful in a number of school asset situations as well as school based projects. We will be using ArcCatalogue to create a geodatabase to hold specific information about points of interest and displaying this in ArcMap.

**Presenter: Rod Prior, Harristown State High School REPEATED as Elective 4.2**

### **3.5 Making the most of MiLK Harnessing the contemporary culture and interests of natural born cyborgs**

**Type: Presentation**

**Presenter: Debra Polson**

MiLK is a mobile learning kit that allows students and teachers to author their own place-based learning events using simple web and mobile technologies. We will demonstrate how MiLK has been used by a number of teachers in various contexts to connect students, curriculum and everyday environments. This workshop will introduce participants to the various MiLK tools and processes; including mapping, designing, playing and reviewing events, group journals, discussion forums, student profiles, and class profiles. We will focus on the role of place as a potential resource for curriculum design and delivery. The MiLK Team are looking for enthusiastic mobile technology champions to join us. No previous experience or training in this area is needed. This workshop is designed to be relevant to all KLAs. During this session teachers will have an opportunity to experiment with simple tools to create dynamic resources for their own classrooms.

### **3.6 Geocaching – The Modern Treasure Hunt**

**Type: Field Activity**

**Repeat of Elective 2.6**

**Presenter: Alan Brummel, Chancellor State College.**



### 3.7a Engaging Young Australians with Asia

#### Type: Presentation

Knowledge and understanding of Asia and Australia's relationship with Asia make an important contribution to building the social capital and economic prosperity of our nation. The workshop will explore:

- \* The need to include the studies of Asia in the geography classroom
- \* How to include the studies of Asia in geography curriculum
- \* Access Asia and other resources to support teaching about Asia in the geography curriculum.

**Presenter: Marcia Rouen, Asia Education Foundation**

### 3.7b Developing GIS skills

#### Type: Presentation

I have heard of G.I.S. and have even been to a workshop or two. But what are the skills I need to be aware of, and that my Geography students need to develop as they move from year 7 to 10? How can I sequentially develop and enhance their skills? This workshop aims to explore these two fundamental questions using a range of Jacaranda resources and practical activities. Teachers will be shown, and use, specific G.I.S. resources they can use with their students.

**Presenters: Mick Law**

### 3.8 Introduction to GPS and linking GPS to GIS

#### Type: Field Activity

Repeat of Elective 1.8 and 2.8

**Presenter: Neil Gray, Maroon Outdoor Education Centre**

## Session 4 Electives

### 4.1 Accessing and Spatially Representing Demographic Data

#### Type: demonstration / workshop

Repeat of Elective 3.1

**Presenter: Pat Beeson, ABS Education Services, Australian Bureau of Statistics and Ken Melchert, Office of Economic and Statistical Research**



#### **4.2 GIS in Asset Management: Creating Custom Layers in ArcGIS**

**Type: Workshop**

**Repeat of Elective 3.4**

**Presenter: Mick Law, Contour Education**

#### **4.3 Eduspace: European Space Agency portal for Earth Observation**

**Type: demonstration / workshop**

Eduspace is a website designed by the European Space Agency (ESA) that is a portal for remote sensing and human influences on earth. The website gives all the information a teacher and students need to do the research, including analysing satellite images of Europe, Africa and the Himalayas. Other areas will become available in the future. Registration is free for schools and students can undertake self-directed learning. This session will demonstrate the Eduspace resource and allow for hands on interaction.

**Presenter: Sally Vellar, Coolum SHS and Luc Zwartjes, Chairman VLA Flemish Geography Teachers Association, Belgium (via videoconference).**

#### **4.4 Creating 3D Spatial Models Using Google SketchUp**

**Type: Workshop**

**Repeat of Elective 2.3**

**Presenter: Rod Prior, Harristown State High School**

#### **4.5a Picture Queensland: Images for learning**

**Type: Presentation**

This workshop will provide an overview of Picture Queensland and how this valuable resource can be used in the classroom. Picture Queensland is a growing online database of over 45,000 images taken from the collections of Queensland collecting institutions. This online collection provides a comprehensive overview of the state's rural and urban development. This workshop will investigate how teachers and students have used Picture Queensland as a learning resource in the past. Particular reference will be made to State Library's partnership with the Learning Federation, and how images from Picture Queensland have been repurposed as "learning objects".

**Presenter: Gavin Bannerman, Outreach Librarian, Queensland State Library**



#### **4.5b Unleashing student creativity to respond to climate change risk**

##### **Type: Presentation**

A pedagogical approach will be outlined that is devised to encourage critical thinking about climate change, by guiding students through a conceptualisation of the implications of environmental change. Students at Woodcroft College, SA, when given the opportunity to examine the potential climate change impacts on a local coastal ecosystem, found the method to be both challenging and engaging.

**Presenter: Dr Douglas Bardsley, Senior Lecturer, Geographical and Environmental Studies, School of Social Science, University of Adelaide, and the School of Geography, Planning and Architecture, University of Queensland. REPEATED as Elective 5.5a**

#### **4.6a Climate Change, Energy and Low Emission Technologies**

##### **Type: Presentation**

Greenhouse gas emissions from fossil fuels (gas, oil and coal) are the main cause of global climate change. Yet fossil fuels form an important part of the global primary energy mix and are expected to continue being the main global energy resource well into the future. This presentation will examine global energy use, its impact on climate and the opportunity presented by low emission technologies with CO2 capture and storage (CCS) as a way of removing carbon emissions from fossil fuel use. Together with renewable and other energy sources, the technology option will facilitate the implementation of a future climate neutral, global energy infrastructure based on de-carbonised electricity and/or hydrogen energy vectors.

**Presenter: Kelly Thambimuthu, CEO, Centre for Low Emission Technology, Queensland**

#### **4.6b Solaris - a Retrofitted Solar Powered Home**

##### **Type: Presentation**

This presentation examines energy use in the home and how to successfully solarise your home to be carbon neutral. This includes the use of solar energy for electricity and water heating, as well as energy and water efficiency improvements. It will give participants some knowledge and skills to undertake energy audits and to identify energy efficiency gains from this process.

**Presenter: Trevor Berrill, Private Consultant, Sustainable Energy**

#### **4.7a Understanding Climate Change**

##### **Type: Presentation**

Andrew will discuss how a range of businesses are addressing the impacts of climate change on their operations based on his experience as a Principle Climate Change Consultant for Maunsell. He will also highlight climate change issues in the community based on his work with the Queensland Climate Change Centre of Excellence. Andrew's presentation will outline some key observations on how to raise community and



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individual awareness and encourage people's adaptation to climate change using the Queensland Government and Maunsell's response as a cases study.

**Presenter: Andrew Zuch, Maunsell Australia Pty. Ltd.**

#### **4.7b Geoscience Australia – Hazards and more**

**Type: Presentation**

**Repeat of Elective 1.5b**

**Presenter: Shona Blewett, Geoscience Australia**

#### **4.8 ExploreThe Le@rning Federation's free digital content for teaching and learning Geography**

In this workshop explore hands-on the hundreds of interactive learning objects, maps, photos, film clips and tools that are freely available to both primary and secondary teachers to create exciting and challenging geographical learning tasks for students.

The Le@rning Federation (TLF), the all-government initiative which makes available free digital curriculum materials to schools, has a wealth of resources which can be used by geography teachers to create exciting and challenging learning tasks for students.

**Presenter: Olivia Clarke**

### **Session 5 Electives**

#### **5.1a Fieldwork Journeys (Australia and Europe)**

**Type: Workshop**

This workshop will demonstrate some fieldwork ideas and provide a range of virtual/visual resources that could be used to motivate teachers and students in your classes. It will look at resources such as video slide shows, moving panoramas and other virtual fieldwork ideas for a range of topics i.e. – Rivers and Valleys, transect of Melbourne to Adelaide by air, Sydney to Adelaide by air, The Adelaide coastline, Adelaide urban, London to Spain and around the whole of the Australian Coastline including the Gold and Sunshine Coasts. These highly visual resources will provide useful stimuli to either initiate fieldwork or follow up on field trips. You will be able to use The Australia's Coastline series and a variety of powerpoint presentations which will provide some basis for fieldwork discussion. For more information on some of the resources available go to [www.ausgeography.com](http://www.ausgeography.com). A DVD of some of the workshop visuals and ideas will be provided for participants.

**Presenter: Mark Manuel, Scotch College, Adelaide**

**REPEATED as Elective 6.1a**



### **5.1b Planet of Slums**

#### **Type: Presentation**

This Workshop will explore the place of slums in global patterns of urbanisation, and the links between world debt and slum development. It will focus on the underlying processes and consequent patterns, using a case study approach to illustrate these. Participants will be introduced to the issues, undertake a couple of student activities, and discuss how and where the issue can be included within their own curriculum..

**Presenter: Stephen Cranby, Camberwell High School, Victoria REPEATED as Elective 6.1b**

### **5.2 Spatial Technologies without spending money!**

#### **Type: Workshop**

This presentation will provide a plethora of spatial technologies websites and how these can be used in the classroom. This is aimed at teachers who are keen to introduce or use spatial technologies but do not have the funds or time to learn a new program. The workshop will provide a stepping stone to the use of more higher level GIS programs such as ArcView.

**Presenter: Rebecca Nicholas**

### **5.3 Urban Renewal or Urban Sprawl: Which is more sustainable?**

Online GIS for teaching planning concepts in Senior Geography

#### **Type: Presentation**

**Repeat of Elective 3.2**

**Presenter: Brett Dascombe**

### **5.4 Profiling a Geographical Area**

#### **Type: Workshop**

This session will concentrate on showing delegates how to pull together information which is readily available on the ABS web site to provide a profile on a Geographical Area.

**Presenter: Ross Johnson, Education Consultant, South Australia**



### **5.5a Unleashing student creativity to respond to climate change risk**

**Type: Presentation**

**Repeat of Elective 4.5b**

**Presenter: Dr Douglas Bardsley, Senior Lecturer, Geographical and Environmental Studies, School of Social Science, University of Adelaide.**

### **5.5b Coastal Management and Effective Use of DVD's in the Classroom**

**Type: Presentation**

This workshop will specifically look at a recent DVD titled "Coastal Management - Australian Beach and Development Issues." The DVD focuses on major issues facing coastal communities and how communities and other stakeholders including developers and governments deal with these. Case studies include the Tweed River in Northern NSW, the Gold Coast, Sydney's Northern Beaches and SW Western Australia (dune protection). The workshop will also look at how Geography DVD's can effectively be used in the classroom using screening with worksheets and discussion, related questions and activities to engage students.

**Presenter: Stephen Weingarth, Geography Teacher and Documentary Filmmaker REPEATED as Elective 6.5b**

### **5.6a Social Justice and Global Citizenship**

**Type: Presentation**

This workshop will explore activities and resources to help engage teachers and students with important global issues. This will include:

1. access to safe water ( case study – Niger)
2. poverty and the role of government and non-government aid
3. child rights ( case study of child labour in India)
4. global citizenship

**Presenter: Rod Yule, Global Education Officer, World Vision Australia REPEATED as Elective 6.6a**

### **5.6b Fundamentals of Renewable Energy Technologies: Activities for middle and upper secondary school**

**Type: Presentation**

This workshop will engage teachers in a number of activities that explore the fundamental earth's science, solar geometry, chemistry, physics, geography, thermodynamics and technological principles behind the common renewable energy technologies (solar water heating, photovoltaics, wind power, micro-hydro).

**REPEATED as Elective 6.7a**

**Presenter: Wendy Miller, Research Fellow in Sustainable Energy at QUT's Faculty of Built Environment and Engineering.**



### **5.7a Using visual texts to enhance student's conceptual understanding of Geography**

#### **Type: Presentation**

Geographers use a range of visual text to communicate information and enhance student understanding. To successfully 'read' such texts students must move beyond simple descriptive or literal accounts of the representation towards a more critical engagement with the subject matter portrayed. They need, for example, to demonstrate an understanding of how the image is constructed, its intended purpose and audience, and the explicit and implicit meanings it seeks to convey. The presentation highlights the increasingly complex nature of the visual texts Geography students encounter, the knowledge and skills they need to interpret them and the ways in which they can be used to enhance students' conceptual understanding.

**Presenter: Grant Kleeman, Senior Lecturer in Education, Macquarie University**

### **5.7b Developing Young Geographers**

#### **Type: Presentation**

Teachers of geography in schools make decisions about how and what they will teach influencing young people's views of the world, and their predisposition and capacity to work towards preferred futures. Whilst I don't wish to argue that schools prepare young people to be scientists, artists — or in this paper geographers — there is an important question which asks to what extent are we teaching about geography versus setting the foundations for students to develop a Geographer's ways of seeing. In this session we will explore the question: what might a best practice view of school geography encompass to develop young people who have a capacity to use a Geographer's ways of seeing?

**Presenter: Jeana Kriewaldt, Graduate School of Education, University of Melbourne.**

## **Session 6 Electives**

### **6.1a Fieldwork Journeys (Australia and Europe)**

#### **Type: Workshop**

Repeat of Elective 5.1a

**Presenters: Mark Manuel, Scotch College, Adelaide**

### **6.1b Planet of Slums**

#### **Type: Presentation**

Repeat of Elective 5.1b

**Presenter: Stephen Cranby, Camberwell High School, Victoria**



### **6.2a Urban development - Using IT to enhance Geography**

Urban Growth – Melbourne/Perth is the latest Geotoolkit module which provides a basic building block of information on the growth of these major Australian cities. Change over time is particularly well shown. Teachers can also create a project of their own area. Approval copy available at the workshop.

**Type: Presentation**

**Presenter: Franco Smargiassi, Compass EduMedia**

### **6.2b The Murray Darling Basin: Using IT to enhance Geography**

**Type: Workshop**

**Repeat of Elective 2.5a**

**Presenter: Franco Smargiassi, Compass EduMedia**

### **6.3 Resource Use and the Environment**

**Type: Workshop**

The Queensland Resources Council (QRC) and the Department of Mines and Energy (DME) have jointly funded up-to-date and industry relevant material. This workshop will look at units of work written for the *Living With Climate Change* and *Sustaining Biodiversity* units. This workshop will provide an overview of both units, as well as the supporting resource material. In particular, participants will be guided through a set of GIS activities and a virtual field trip of the Sandmining in North Stradbroke Island, a key component of the Sustaining Biodiversity unit.

**Presenter: Rebecca Nicholas and Anne-Marie Gerlach**

### **6.4a Population, Resources and Development – Curriculum Showcase**

**Type: Presentation**

This presentation will provide ideas for work programs and assessment tasks based around units associated with Population, Resources and Development. In particular, Tim will showcase how he has incorporated the work of a new South Australian charity, founded in January 2007 and based in Uganda, into these units of work.

**Presenter: Tim Agnew, Prince Alfred College, South Australia**



### **6.4b Teaching Geography with a teddy bear**

#### **Type: Presentation**

David Lergessner may have retired from teaching but his teddy bear – Ben – keeps bringing him back. See how David uses a teddy bear and other items of interest to involve students in the study of Geography. Expect to see Ben in Hawaii, Antarctica and many other places from his two world trips in 2007.

**Presenter: David Lergessner, Session lecturer, Griffith University**

### **6.5a Planning is awesome**

#### **Type: Presentation**

Planning really is Awesome and the Planning Institute of Australia wants more geography students studying urban and regional planning. With a current nation-wide shortage of planners the institute has produced a DVD called *Planning is Awesome* which showcases twelve young professionals working in a range of planning fields. The DVD was produced to promote planning as a career and give students an insight into the who, what, when, where and why of planning. The DVD highlights the broad range of fields that planning has to offer – from 3D Modelling, to Development Assessment, to Environmental Planner this DVD has it all! Kate will showcase the DVD and talk about the important role of geographers in planning. Participants in the seminar will receive a copy of the DVD.

**Presenter: Kate Isles, PIA DVD Project Manager**

### **6.5b Coastal Management and Effective Use of DVD's in the Classroom**

#### **Type: Presentation**

Repeat of Elective 5.5b

**Presenter: Stephen Weingarth, Geography Teacher and Documentary Filmmaker**

### **6.6a Social Justice and Global Citizenship**

#### **Type: Presentation**

Repeat of Elective 5.6a

**Presenter: Rod Yule, Global Education Officer, World Vision Australia**



### **6.6b A plague on all our houses – Exploring the Geography of Disease**

#### **Type: Presentation**

Globalisation and global transportation systems allow infectious diseases to travel the world at alarming rates impacting on the health, wellbeing and development of large numbers of people. This workshop will develop the link between the issue of globalisation and disease and some of the key ideas within the New Senior Geography syllabus focus unit of 'Exploring the Geography of Disease'. The workshop will incorporate sample learning experiences and showcase some of the resources available through the Global Learning Centre to address this issue.

**Presenter: Hilary Macleod, Global Learning Centre, Queensland**

### **6.7a Fundamentals of Renewable Energy Technologies: Activities for middle and upper secondary school**

#### **Type: Presentation**

**Repeat of Elective 5.6b**

**Presenter: Wendy Miller, Research Fellow in Sustainable Energy at QUT's Faculty of Built Environment and Engineering.**

### **6.7b Strengthening Geography Teaching Standards**

#### **Type: Presentation**

In 2007, *The Strengthening Standards of Teaching through Linking Standards and Teacher Learning: The Development of Professional Standards for Teaching School Geography* research project commenced. It aims to investigate how multiple perspectives on quality geography teaching can add to the development of professional teaching standards, and how professional teaching standards that are grounded in practice can be used to support teacher professional learning and the professional knowledge base that teachers build through this learning. A notable element of the research design is that it is based on the conceptual approach of complementary accounts whereby videos of accomplished classroom teachers in Victoria, NSW and SA will be made in order to study how teachers and students negotiate and articulate the meaning of accomplished teaching. The video records will be supplemented with post-lesson video-stimulated interviews with students and the teacher. This session will outline the research design, view examples of the first phase of complementary accounts and seek participant input. *The project is being conducted Dr Dianne Mulcahy (team leader), Jeana Kriewaldt, Professor David Clarke, Nick Hutchinson (AGTA), Anne Dempster (GTAV), and Fran Cosgrove from the Victorian Institute of Teaching.*

**Presenter: Jeana Kriewaldt, Graduate School of Education, University of Melbourne and Nick Hutchinson, AGTA Chair**



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## **Keynote Session 1 Monday Sept 29 9.00-10.00**

### **GIS IN THE CLASSROOM – Opportunities and Challenges**

Keynote address by **Derek Milton, ESRI Australia**

This presentation addresses the opportunities and challenges for teachers to introduce the increasingly popular geographic information systems (GIS) technology into the classroom as a tool for discovering the world in which we live.

GIS is an exciting emerging technology that has gained considerable interest and application in many industries across the world ranging from marketing of products to the management of electrical utilities. With the advent of such sites as Google Maps, people with little or no experience in technology are exploring the world in which they live. Technically, the excitement is brought about through the mix of database and graphics that allows for the visualisation of information. For teachers it provides the opportunity of exploring, analysing and understanding the world using an exciting technology. This presentation is aimed at providing teachers with the information that will assist introducing the geographic technologies into the classroom. The presentation will open by addressing “What is GIS?” There will be some examples of how it is being used in industry before proceeding to look at how it is and might be used in the classroom. The critical issues of resources required and their availability to teachers will be addressed, including options for local geographic data as well as international, national and local support networks. It is hoped that the information provided will position teachers to take up the challenge of introducing a very useful, exciting and rewarding information technology to the classroom.

### **About Derek Milton**

Dr Derek Milton graduated from the University of WA with a BA (Hons) in Geography before proceeding to a PhD in Climatology. The requirement for analysing large amounts of climatic data in a spatial context took him into the realm of GIS. In 1972 Derek went to the University of Manitoba, Winnipeg, Canada to teach climatology. Extremely cold winters drove Derek back to Western Australia in 1985 where he joined ESRI Australia. Here he focussed on applications of Geospatial Information technologies. He has taught at the University of Western Australia and worked at Fugro Spatial Solutions.



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Derek has been very active in the spatial information community. He was party to the setting up of the GIS in Schools competition and has devoted considerable time to ensuring that the industry voice is heard through his activities with SSI and WALIS. Recognition of his contribution to the industry has come with the Eminent Individual Award 2002 (AURISA now SSI) and the Centenary Medal.

Derek is currently with ESRI Australia where he works with clients in developing strategies that exploit geographic information for business advantage. Clients include organisations from both the private and public sector. Derek believes very strongly that the GIS technologies will only realise their true value when they are an integral part of an organisation's business systems.

**Derek's talk focuses on how one can take advantage of Geography that is Above and Beyond to provide GIS in the Classroom**

## **Keynote Session 2 Thursday October 2 9.00-10.00am**

### **Earth, Maps, and Mashups - Google in the Geography Classroom Keynote Address by Raul Vera, Google Australia**

Raul will demonstrate and review the products, highlighting features that might be particularly compelling to students and teachers. From the visually engaging immersive experience of Google Earth through the utility of Google Maps to the opportunities for creating simple geographic mashups, these tools provide excellent opportunities to engage students and keep their interest. Students can not only immerse themselves in digital representations of the world, but can do so collaboratively with others, contribute and share content, and even embed these technologies in their own websites. Raul will stress the social aspects of these tools, involving classroom groups or friends and family, because these are always of great interest to young people and are part of an important emerging social-networking trend on the internet.

### **About Raul Vera**

Raul Vera has been involved in digital-media technology (video animation, graphics, image processing, printing) for over 25 years, as software developer, architect, entrepreneur, and team leader. He currently has 3 patents pending. Raul joined Google in July of 2007 and is responsible for leading and expanding the Geo team at Google Australia working extensively in new product development.



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## **Presenter Biographies**

### **Tim Agnew**

Tim is the Head of Humanities and a senior Geography teacher, at Prince Alfred College in Adelaide. He has been involved in developing and trialled a number of work programs and assessment tasks, incorporating the work of a new South Australian charity [founded only in January 2007] based in Central Uganda.

### **Melanie Ashby**

Melanie Ashby is Emergency Management Australia's Manager for School Education. She has taught in government schools (primary) and the VET sector. She is passionate about providing teachers and their students with engaging and relevant educational materials.

### **Gavin Bannerman**

Gavin Bannerman has been a member of the State Library of Queensland's Heritage Collections unit since 2005, following completion of a Graduate Diploma in Records Management and Archives. During this time, Gavin's duties have included: processing archival collections, training and supporting members of the cultural sector to digitise their image collections, facilitating digital storytelling projects and piloting cultural clearance procedures for displaying Indigenous images on Picture Queensland.

### **Dr. Douglas Bardsley**

Dr Douglas Bardsley is a Senior Lecturer in Geographical and Environmental Studies at the University of Adelaide. Until recently he was working at the University of Queensland, School of Geography, Planning and Architecture. He has completed a review of vulnerabilities of natural resources in the Adelaide and Mt Lofty Ranges to projected climate change, and is developing methods for raising awareness and implementing adaptation options to respond to the projected change. Trained as an agricultural scientist, a social geographer and an educator, his research interests over the last 15 years have focused on education for sustainable development, environmental and agro-ecological risk management, and links between conservation and development. His research has been undertaken while based in universities in Australia and the UK, and while working for the South Australian Government, and has involved fieldwork in different contexts in Australia, Thailand, Turkey, Switzerland, Nepal and the European Union.

### **Katrina Beard**

Katrina Beard is Emergency Management Australia's E-learning Officer and has extensive experience in the use of e-learning and web technologies having previously worked within the Department of Education Victoria's E-learning unit.

### **Pat Beeson**

Pat is an experienced Geography teacher with a special interest in the integration of spatial technologies in the classroom. Pat introduced GIS into the Geography curriculum, and developed materials for use in the classroom, whilst leading the Geography Department at Presbyterian Ladies College in Melbourne.



In addition, Pat has produced a GIS supplement to the Pearson Atlas. Based upon fieldwork in Australia's capital cities, this publication develops the collection, storage, display and analysis of field data using GIS. Pat now works as an Educational consultant for the ABS, where she facilitates the use of Census output in schools.

### **Trevor Berrill**

Trevor Berrill is an award winning, private consultant in sustainable energy. He has worked in this field for the past 30 years including in research at UQ and QUT, power system design and installation, policy and education and training. He is a founding member of the Alternative Technology Association and the Australasian Wind Energy Association and past state president of the Solar Energy Society (Qld Branch). Trevor constructed and taught from a renewable energy powered, energy efficient centre for 15 years where students learnt by "living with renewables". His home is fully solar powered and carbon neutral. Trevor is trained in mechanical engineering and energy auditing at QUT and has a Masters of Environmental Education degree.

### **Shona Blewett**

Shona Blewett is the Education Officer at Geoscience Australia and the lead educator for the over 6000 school students who visit the Geoscience Australia Education Centre each year. Shona is a graduate of Swansea University (UK) where she studied geology BSC (Hons). She obtained a Diploma in Education (PGCE) from Keele University (UK) and went on to teach geology and geography to senior level at Bedford High School. After migrating to Australia she taught geography at Canberra Girl's Grammar School from 1991 to 2002 then returned to study at University of Canberra, attaining a BEd in primary education in 2005. Shona has worked for Geoscience Australia since 2006.

### **Alan Brummel**

Alan has been a Maths/Science teacher for 20 years ranging from 'High-tops' out West to large High Schools on the Sunshine Coast. He is currently the Maths Coordinator for Chancellor State College (Secondary Campus), covering Years 7 – 10 and involved with the "World Class Teaching Project". Alan enjoys taking maths students geocaching and has created some interesting caches of his own around the university.

### **Kay Channon**

Kay is a Senior Geography teacher at Dakabin SHS. Kay has been a long time GTAQ Council member. Kay is passionate about fieldwork opportunities in teaching Senior Geography and frequently has students involved in out of the classroom activities.

### **Olivia Clarke**

Dr Olivia Clarke is a Senior Project Manager at The Learning Federation (TLF). She works with education jurisdictions, pre-service tertiary institutions, professional associations and schools about access and use of the digital curriculum content made freely available by the national initiative. Previously she was Curriculum Coordinator at PLC in Melbourne



### **Stephen Cranby**

Currently teaching geography [years 9-12] at Camberwell High School, Stephen's teaching has predominantly taken place within the state system though he has some experience of the independent system. He has taught in both rural and urban [outer west and inner east – Melbourne] schools, including 2 years in the Geography department at Monash University, and 7 years tutoring University Enhancement [year 12 students undertaking 1st year university geography]. A life member of the Geography Teacher's Association of Victoria, and former council member and president of AGTA, Stephen has been an active contributor to both GTAV and AGTA conferences for more than 20 years. In that time he has authored or contributed to numerous textbooks and articles on geographic education.

### **Nick Cutajar**

A recently - retired teacher who has taught for nearly twenty years in Europe before settling in South Australia in 1986, where he taught for the next twenty years. He has a broad repertoire of subject teaching having taught mathematics, junior science, physics, ICT studies, Design & Technology, Web design, Animation and digital imaging. He has also written and presented award-winning TV documentaries, a fortnightly radio programme and edited and authored books and magazines. He has spent the last few years of his teaching career as Coordinator of ICT, Technology Across the Curriculum, Technology Studies, Maths and Science at Ocean View College, Croydon High School and Enfield High School, South Australia. The broad context for this work has been his interest in online teaching and learning, developing intranets for student learning in science, maths, and ICT-related subjects. Mr. Cutajar is currently working as a consultant for Education.au Ltd, and as a member of the OzProject team of project designers, creators and mentors.

### **Brett Dascombe**

Brett currently teaches at Wavell State High School. Brett worked for ESRI for two years and now regularly presents at conferences. Recently Brett participated in the Share IT Conference at Ferny Grove SHS and was a STiS presenter last year.

### **Terry Gallagher**

Terry is a Principal Policy Officer currently working on syllabus design in the Curriculum Resources Branch of the Queensland Studies Authority (QSA). He was part of the team that developed the QCAR Essential Learnings and Standards for the QCAR project. Prior to working at the QSA, Terry was a Social Science Head of Department and a project officer involved in the development of the Qld SOSE syllabus at the QSCC. He has taught in a number of state schools throughout Queensland.

### **Anne-Marie Gerlach**

Anne-Marie is a practising Geography teacher and Head of Humanities at St Margaret's Anglican Girls School in Brisbane. She has been President of GTAQ for the past 4 years and is also a Director on the AGTA Board. She has written Geography curriculum material for various organisations and has an interest in making students passionate about real world examples of Geography and field work.



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### **Neil Gray**

With a background as an earth science and physics teacher and a passion for all bush pursuits (expedition walking and exploring, rogaining and geocaching), Neil has been with EQ since 1992, spending most of his career at Maroon Outdoor Education Centre. Since 2005 he has been the Teacher in Charge at CEEC. Successful in receiving an ICT Innovators (GIS) project grant, the centre is using GPS and GIS to offer a broad range of spatial opportunities to visiting schools.

### **Doug Hoare**

Doug spent many years teaching senior Geography at Brisbane State high School and Dakabin State High School. While now retired, Doug has lost none of his enthusiasm for sharing information which will help other Geography teachers work in the outdoor classroom.

### **Nick Hutchinson**

Nick Hutchinson has taught geography forever, contributed to a number of texts and articles and attended many conferences. He is equally passionate about culinary pursuits and African-American music. Nick is Chairperson of AGTA.

### **Kate Isles**

Kate Isles is a passionate planner who has made a recent leap across to the development industry. Prior to joining DGS Property Group, Kate worked as a Senior Town Planner with PLACE Design Group for six years. This role saw Kate facilitate a variety of applications from small scale developments through to major Master planned developments. Kate's strengths lie in her ability to communicate freely and rationally with the various authorities to deliver solutions that are economically, socially and environmentally sound premised on her planning and development knowledge.

Kate has also been extensively involved with industry bodies including the Planning Institute of Australia and the Urban Development Institute of Australia. From 2002 until 2006 Kate was the President of the National Young Planner Group. During this time she implemented a number of new initiatives to help support and encourage planning as a career this included the running of the first ever National Congress for Young Planners called YPCONNECT which is now an annual event of the calendar. She has many accolades to her name including, Qld Young Planner of the Year (2003), Finalist - Young Professional of the Year (2006) and UDIA - Winner - Outstanding Achievement by a Woman - Professional or Facilitative (2006).

Of recent times, Kate took on the role of project managing the Planning is Awesome DVD to encourage and showcase planning as a profession. The DVD has been a huge success and is a fantastic tool to celebrate and embrace a profession that is so important to the development of our cities, towns and places.

### **Ross Johnson**

After 6 years as a secondary school teacher, Ross worked for the Australian Bureau of Statistics between 1973 and 2005. Much of his time was spent working in Information Services and Client Services. As the ABS SA Education Services Officer and a member of the GTASA Executive, he has been active in a number of projects assisting teachers to obtain ABS data and showing them how to use it in their teaching. In 2007, he facilitated an online GIS PD pilot test by GTASA, SA Education Department.



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### **Susan Kempson**

Susan is currently Spatial Systems Team Leader at the City of Melbourne. Susan has had experience in the promoting and implementation of GIS technology within schools over the past 8 years and was an active member of the GIS in Schools program when she was with ESRI Australia. She is currently working with a number of Victorian schools to develop lesson plans using local government's spatial data.

### **Maggie King**

Maggie King is the publishing editor for Macmillan Education Australia. With experience in teaching SOSE and a particular enthusiasm for geography, she has assisted in developing a range of geography textbooks for Queensland.

### **Dr Grant Kleeman**

Dr Grant Kleeman is a Senior Lecturer in Education at Sydney's Macquarie University where he coordinates the School of Education's Secondary Teacher Education Program. He is an experienced Geography teacher, curriculum consultant and examiner. Grant is also one of Australia's leading Geography textbook authors, President of the Geography Teachers' Association of NSW and a Director of AGTA.

### **Jeana Kriewaldt**

Jeana is a lecturer in the Graduate School of Education at the University of Melbourne, Australia. She specializes in geographical education as a pre-service educator. A life member of the Geography Teachers' Association of Victoria, she has continuously served on Committee since 1993, including three years as President. Previously a contributing author to Geography textbooks, her most recent contribution is as editor to Keys to Geography.

### **Rod Lane**

Rod is a Lecturer in Education (HSIE and Assessment) at Macquarie University. He is an experienced Geography teacher, author, HSC examiner, workshop presenter and teacher educator. Rod has taught methodology units in the Social Sciences at Macquarie University as both a part time and full time lecturer over the past 10 years. Rod's research interests include; critical thinking and effective pedagogy in Geography; the investigation of students' misconceptions in the Social Sciences and Development issues/responses in Mega Cities.

### **Mick Law**

Mick, a geography and special needs teacher since 2001, started implementing GIS at Ferny Grove SHS, where his students were successful in the STiS competition with their community crime project. He then moved to Brisbane Grammar and then coordinated the schools project nationally for ESRI Australia in 2006 and 2007. Mick has presented at the STiS Expo for the last three years. He works as an Educational consultant in spatial technologies.

### **David Lergessner**

David has taught Geography and been involved with both GTAQ and AGTA from chalk and talk to computers and data projectors. Having 'retired' in 2005, he has been drawn back to teaching and is currently passing on his 'tips' to first year Geography pre-service teachers at Mt Gravatt's Griffith University. At Deception



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Bay High, students approached David to take 'Ben', a teddy bear, on his many travels. Ben's cousin, another 'Ben' now travels the world with David. David is keen to share his travel experiences with a teddy bear and how a bear can be used to involve students in the study of Geography.

### **Hilary Macleod**

Hilary Macleod is Coordinator/ Education Officer at the Global Learning Centre. The GLC is a not-for-profit, community organisation providing professional support and resources to educators in social justice, peace and sustainability. Previously Hilary has been a Lecturer in SOSE and Environmental Education at Queensland University of Technology in Brisbane, Australia and worked for the Queensland Education Department for 18 years in various roles including secondary teacher, regional education adviser, and Senior Education Officer, SOSE and EE. She has also been a short term and long term consultant on education and environmental projects in Nepal, Malaysia, Tuvalu and PNG.

### **Malcolm McInerney**

Malcolm McInerney has been involved in teaching and developing classroom materials using spatial technologies and interactive media since 1997. In 2000 and 2002 Malcolm's students won the Research and Investigation prize in the University of New South Wales Sustainable Living Competition and from 2001-2007 his students have won the South Australian section of the Spatial Science Institute 'Spatial technology in Schools' competition. Malcolm has developed a "GIS Skill Development Course" for Secondary students and a range of across the curriculum resource materials for Geography, Science, History and Tourism studies. These materials are being used in over 500 schools across Australasia and have won many AGTA Geographical publication Awards in 2002, 2004 and 2006. .

During the years 2001-2007 Malcolm has become increasingly involved in the 'teaching the teachers' process across Australia and has trained over 500 teachers via three day workshops, conference workshops and GIS Roadshows across Australia. Since 2004 Malcolm has been AGTA's delegate on the Spatial Science Institute's Education Advisory Committee (SEAC). Malcolm's work with introducing spatial technology into schools across Australia was recognised in 2002 by a National Excellence in Teaching Award, 2006 by a National Quality Schooling Award and a Churchill Fellowship in 2007.

### **Mark Manuel**

Mark, a Geography teacher for 35 years, is currently Head of Geography and Society and Environment at Scotch College, Adelaide. He was Past Website Manager, Vice President, Business Manager and Treasurer of the Australian Geography Teachers Association (AGTA) and also Past Vice President, Secretary and Website Manager of the Geography Teachers Association of South Australia (GTASA). Mark was Chairperson of the SSABSA Geography Subject Advisory Committee 2005-2006, author of *A Geography of South Australia*, and website manager and developer of [www.ausgeography.com](http://www.ausgeography.com).

### **Ken Melchert**

Ken has been supporting North Qld schools since his time as the GIS supervisor at Townsville City Council, in projects such as the Pimlico SHS graffiti and mosquito mapping investigations. He continues to support the implementation of GIS in schools in his role at the Qld Spatial Information Office and OESR.



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### **Wendy Miller**

Wendy is a Research Fellow in Sustainable Energy at QUT's Faculty of Built Environment and Engineering. A former teacher, she has authored and edited a range of energy education materials ranging from primary school resources and technical training materials to post graduate and community level workshops.

### **Colleen Morgan**

Colleen is a research associate at the Australasian CRC for Interaction Design in Brisbane Australia. Colleen received her Bachelor of Creative Industries and First Class Communication Design Honours Degree from Queensland University of Technology. Conducting practiced-based research, Colleen designs and implements ICT urban interventions, exploring how they can foster community sentiment and social capital. Most recently Colleen has been applying her expertise in ICT and community in Serious Games projects particularly for schools, universities and cultural institutions.

### **Rebecca Nicholas**

Since integrating spatial technologies into her teaching at Pimlico SHS, Rebecca moved to Toowoomba, teaching at Fairholme College, where she coordinated the TIGGIS network, and then Somerville House where she coordinated the B-GIS network. Rebecca was the recipient of the QLD Spatial Excellence Awards for Excellence in Spatial Education in 2006. She was the Vice-President of GTAQ and was conference convenor of the Queensland Geography Conference. Rebecca now teaches at Bacchus Marsh Grammar in Victoria.

### **Debra Polson**

Debra is an academic and independent designer, focused on exploiting unique aspects of digital games and creative social networks. Debra holds an academic position at Queensland University of Technology, Communication Design Department and has recently been seconded to the Australasian CRC for Interaction Design (ACID) as Senior Research Fellow. Debra has conceived and implemented a number of multi-discipline research and development projects, such as SCOOT, CIPHER CITIES, MILK and SCAPE that endeavour to exploit the potentials of computer games and mobile technologies to improve human relationships in environments such as schools, museums and everyday public places.

### **Russell Priebbenow**

Russell Priebbenow is Director, Survey Policy and Infrastructure with the Queensland Department of Natural Resources & Water. Russell is responsible for the legislative and policy framework for surveying and mapping. Russell is a registered cadastral surveyor and has been involved with surveying and mapping policy and business direction in the Queensland government for 17 years. Prior to this, he carried out research into the mapping applications of imagery from the SPOT satellite, and attained a PhD from the University of Queensland for this research. Russell is a member of the Surveyors Board of Queensland. He is also a member of the Faculty Advisory Committee for the Faculty of Engineering and Surveying at the University of Southern Queensland and was recently elected as Chair of the Intergovernmental Committee on Surveying and Mapping (ICSM).

### **Rod Prior**

Rod began teaching with Education Queensland after coming from an IT Industry background in 2000. He previously worked as an IT coordinator for a number of schools. Rod has been teaching at Harristown State High School in Toowoomba since 2004. He attended the ESRI International Education conference in San



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Diego (2005). I have incorporated spatial technologies into the curriculum at Harristown, as well as providing a number of PD opportunities for teachers including the 2006 and 2007 STiS Expo.

### **Bob Rodgers**

Bob Rodgers has been working with computers for over 25 years. In the early 1990s he was an ICT consultant with the Education Department and set up the Business Education Centres and Electronic Learning Centres in the then South Coast Region. He has been the IT HOD at Windaroo Valley High school since the school opened in 1994. The school has always strived to give students as wide a range of experiences as possible and because of this has had equal numbers of Mac and Windows computers as well as a range of software applications and has therefore used the ArcView GIS on both Mac and IBM but now use MyWorld.

### **Marcia Rouen,**

Marcia Rouen is Queensland's Asia Education Foundation Adviser. She is also Principal Education Officer (SOSE) with Curriculum Division, Department of Education, Training and the Arts, a position she has held for the past seven years. Marcia is a former Head of Department Social Science and teacher of Geography in Education Queensland schools.

### **Franco Smargiassi**

Franco's teaching career began in 1967 and spanned a period of 19 years in regional centres. He began creating resources for geography in 1978 with the development of stereoscopes. In 1995 he began the development of software, and different applications for Geography including the Geodata series, Australian Landscapes, Let's Map Australia and Australian Cities over Time. Franco has been a pioneer in the use of GIS in geography, and their first product in 1998 (Gateway into Bali), was a seminal effort. More recently the Geotoolkit was developed specifically for education, together with a number of self contained modules.

### **Dr. Kelly Thambimuthu**

Dr. Kelly Thambimuthu heads the Centre for Low Emission Technology as its Chief Executive Officer and brings with him a wealth of experience and knowledge as a result of having worked in the field of low emission technology for over 20 years. His ongoing commitment to our environment includes other roles such as: Chairman since 1995 of the IEA Greenhouse Gas R&D Programme, the leading group within the International Energy Agency/Organisation of Economic Cooperation and Development (IEA/OECD) evaluating options to achieve deep reductions in greenhouse gas emissions from fossil energy use; an editorial panel member and coordinating lead author of the UN Intergovernmental Panel on Climate Change (IPCC) group formed to write a special report on CO2 Capture and Storage as a climate change mitigation option; and a member of the Technical Expert Panels for the US FutureGen and the Sask Power, Canada Zero Emissions projects. Kelly has also recently been appointed to the Queensland Government's Clean Coal Council. Kelly holds degrees at the Bachelor's, Master's and Doctorate levels in chemical engineering from the University of Birmingham, UK, McGill University, Canada and the University of Cambridge, UK.



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### **Lyn Thane**

Lyn Thane is the humanities publisher for Macmillan Education Australia. An experienced geography teacher, she has used her expertise in curriculum design to publish a comprehensive range of geography resources for Queensland, New South Wales and Victoria.

### **Sally Vellar**

Sally has been teaching for two years in the areas of SOSE, geography and English. She immediately engaged with spatial technologies and implemented them within her teaching practice. Sally is currently investigating and trialling the delivery of spatial learning experiences with interactive whiteboards.

### **Stephen Weingarh**

Stephen has a BA Earth Sciences/Geography Major from the Macquarie University and 27 Years teaching experience in Geography, Business Studies, Commerce and other Social Sciences subjects in NSW Dept. of Education and Training schools plus four years as Media Studies Coordinator at St. Ignatius College Riverview. Steve is the author of the textbook 'Introducing Geography'. He is currently teaching in HSIE Department at Model Farms High School, Baulkham Hills, Sydney. He also has many years experience in scripting, filming, directing and post production of documentaries. These documentaries are mainly educational programs made for EDVID, Classroom Video and currently for Pro Doco Pty. Ltd, a video production and distribution company of which he is Director. Stephen has worked on some 25 programs in Geography and Media Studies, currently marketed to all Australian schools and schools in Malaysia.

### **Rod Yule**

Rod Yule is the Education Officer for World Vision Australia. Rod has extensive experience in both state and independent schools, including five years as a Deputy Principal. Rod produces curriculum resources and regularly conducts pre-service and in-service teacher training on global education issues.

### **Andrew Zuch**

Andrew is a Principal Consultant (Climate Change) with Maunsell Australia Pty Ltd. He has influenced the development of climate change policy and practice in Australia at the national, state and local government levels. He led the development of Queensland's adaptation action plan, contributed to the development of Australia's National Climate Change Adaptation Framework, and helped develop local government guidance materials. While Manager of Climate Policy and Advice at the Queensland Climate Change Centre of Excellence he was responsible for the provision of strategic advice to the Queensland Government on climate change adaptation and greenhouse gas emissions. His climate change expertise is founded on almost two decades of professional practice in sustainability, greenhouse and climate change assessments, land use planning, and natural resource planning and management. Andrew has held senior roles in state and local government and is highly skilled at interacting with clients, politicians, media, stakeholders, business and community groups on sustainability and climate change issues. He has strong capabilities in the areas of policy and advice, legislation development and compliance, industry policy and analysis, and community engagement.