discover







Education programs

Sydney Olympic Park offers a range of engaging educational experiences for K-12 school students and accredited Teacher Professional Learning workshops.

Early Stage 1

Our Place

Stage 1

- Park Safari
- Lets Go Walkabout

Stage 2

- Nature of Living Things
- Wangal Walkabout

Stage 3

- Investigating Mangroves
- Bennelong and the Wangal

Stage 4

- Landscapes and Landforms Coastal Wetlands
- Water in the World Wetlands
- Water in the World Urban
- Place and Liveability

Stage 5

- Environmental Change and Management
- Changing Places

Stage 6

- Biophysical Interactions
- Urban Places Urban Renewal
- Ecosystems at Risk

Teacher Professional Learning

• Koori Classroom

Education Events

- Youth Eco Summit for Secondary Schools (September)
- Youth Eco Summit for Primary Schools (November)

For more details on excursion programs and related syllabus outcomes please visit our website. sydneyolympicpark.com.au/education | 02 9714 7888 | education@sopa.nsw.gov.au



Digital Literacy and Digital Fluency

Martin Pluss, Geography Teacher and Dean of Learning, Loreto Normanhurst

How do you store your family photos? Do you still have a photo album or are all your photos digital? If you have an album, what is your process for choosing photos to print and place in an album? If you only have digital photos how do you manage them? How often do you take them off your phone or do you use a camera? Do you have both because you are not sure which way to jump?

These types of questions can be applied to many aspects of life and learning. Do you keep a paper diary or schedule your life through your phone and laptop? If you have to write something that requires deep thinking do you start with pen and paper, go straight to the word processor or make some notes on your phone?

Your answers to these questions relate in part to your digital literacy and digital fluency.

Digital literacy "refers specifically to the range of skills, knowledge and competencies required to operate effectively in a world immersed in digital technologies." CORE Education

At Loreto Normanhurst we have had success in normalising the use of technology for appropriate age-specific, learner-centred, digital literacy. Now we are turning our attention to building digital fluent students who "can decide when to use specific digital"

technologies to achieve their desired outcome... and can articulate why the tools they are using will provide their desired outcome." Ministry of Education NZ TKI Te Kete Ipurangi

How do we create digital fluency in our students? We encourage the girls to leverage technology to create new knowledge, deal with new challenges and issues, at the same time complementing critical and creative thinking, complex problem solving and social intelligence within and beyond the school gate.

Digital fluency flows into student learning, for example, through understanding data, leveraging digital tools of communication and in their digital creativity:

1. In an era of information overload, having digital data fluency is crucial. Students need to develop the capacity to use data to make informed decisions, ask more questions and develop deeper learning.





For example, students sometimes only look at the final mark of an assessment task. As they become fluent in interpreting and using data they can break down performance in multiple choice, short answer and extended written responses to measure improvement.

2. In learning students need to be digitally fluent in communication. Discerning the appropriate digital media resources while identifying bias, errors of omission and facts requires a savviness in using digital tools. A digitally fluent student can tell her story by making her presentation in person but she is also required to use digital storytelling skills whether it be in an assessment in school, a tutorial presentation at university or a marketing lobby in the work environment. This requires not only the ability to use but create material, for example, through social media, augmented reality, QR Codes, blogs, wikis, survey software, infographics, screen capture videos podcasts and videos.

3. Students can be digitally fluent by leveraging digital tools to creatively undertake tasks and activities. Instead of taking notes they can creatively learn their work by using the mind mapping software 'Inspiration' to sort the logic of their ideas and learning. Alternatively, they can audio record their notes and listen to them at their desk, in the backyard, on the back deck, in the gym or on a walk/run.

It is most important to encourage face-to-face conversations, use a pen and paper, keep a photo album and handwrite a journal and maintain an analogue diary. Likewise, it is important to be abreast of and use the digital tools which can assist learning at school and to this end we have been successful in building the digital literacy of our students.

We are still on the journey of attaining digital fluency across the curriculum whereby students know which digital tools to use for what purposes. We are confident we are on a path that will help the girls' learning and life skills and I encourage the geography community to be part of the journey.



Virtual Excursions

Melissa Ellis

Southern Cross School of Distance Education provides primary and secondary full-time, pathway and single course students with a wide curriculum in the context of distance education.

Our student are located over a vast area spanning from Tweed Heads in the North. Coffs Harbour in the South and West to Inverell. In an attempt to provide, flexible learning and quality course material, the staff teach using an online learning management system called Canvas, and Adobe Connect, phone lessons, videoconferencing, mini-school days and teacher visits.

Teaching Geography via distance education poses a practical challenge and the HSIE faculty at Southern Cross School of Distance education have endeavoured to make learning materials engaging and accessible. Many fieldwork methodologies and geographical skills can be taught over the phone, using video and at mini schools. However, when it comes experiencing geographical excursions our students are at a disadvantage. For a variety of reasons our students can not participate in face-to-face fieldwork. To provide our students with this mode of learning, we have begun creating 'Virtual Excursions' which are quality video resources where teachers participate in an excursion as a class would. Experts such as National Parks Discovery Rangers, archaeologists, local residents, Indigenous elders are interviewed.

The first completed body of work 'Lake Mungo Virtual Excursion' consists of seventeen cross curriculum episodes with a geographical focus on the topic 'Landforms and Landscapes'.

The 'Lake Mungo Virtual Excursion' was developed in a massive collaboration effort with traditional tribal groups Mutthi Mutthi, Paakantji and Ngyiampaa people, Jim Bowler, Lake Mungo National Parks and Wildlife, Lake Mungo Youth Project, Southern Cross School of Distance Education and the NSW Department of Education Learning Systems department. All interviews belong to the individual participating and have been produced for educational purposes. The series of seventeen episodes are freely available on the NSW Department of Education Learning Systems Youtube site – https://www.youtube.com/user/LearningNSWDEC/ playlists. Or Search each episode on Youtube.

Episode List

- Episode 1 Acknowledgment of Country
- Episode 2 Introduction
- Episode 3 A Landscape for Dreaming
- **Episode 4 Location Description**
- Episode 5 Willandra Lakes Environment
- Episode 6 Ancient People
- Episode 7 Ancient fauna
- Episode 8 The Megafauna Mystery
- Episode 9 Lady Mungo and Mungo Man
- Episode 10 Burial Customs
- Episode 11 Lake Mungo and European Occupation
- Episode 12 Lake Mungo Today
- Episode 13 Soil and Geology
- Episode 14 Land Management World Heritage
- Episode 15 Repatriation as a social justice issue
- Episode 16 Fossil formation
- Episode 17 The Ecosystem Today
- Extra Message from Mungo







In the age of alternative facts, we need to teach our kids to uncover the truth

Posted by Dr Rod Lane and Dr Penny Van Bergen

Misinformation is an increasingly difficult challenge for Australian teachers and students. In a world of fake news, sponsored news and marketing posing as news, how do we arm kids with the skills and knowledge to tell fact from fiction?

Sam scratched her head. Mobile phone in-hand, she puzzled over her Year 8 Physical Education assignment. The assignment asked her to rate the nutritional content of her diet. She googled. Some articles said the soft drink she had for lunch contained too much sugar. But another, published in an online journal, claimed that one soft-drink per day is healthy. Sam wasn't sure.

How do we make sure that Sam doesn't stop at the first article she finds and presume its content is accurate?

"Alternative facts" have always been present in education. Students of the 1980s and 1990s will remember their teacher pointing out the occasional inaccuracy in a textbook, for example. But here the problem was always contained. Textbooks had typically been through an editorial process and vetting by the school. Students researched their projects from these pre-agreed texts and there was little opportunity to dispute their findings.

Students now have access to a world of information outside the classroom walls. Google, Wikipedia, YouTube and Facebook have become the primary source of research for school projects. And it's difficult for students to tell if the information they find is right or wrong.

It is impossible to contain what students find online, and nor should we. The internet provides access to a mind-bogglingly wide range of perspectives and data in mere seconds. Students can access government agencies like the Australian Bureau of Statistics and CSIRO and find reports only available by mail order in the past. Even Wikipedia, sometimes maligned for its reliance on crowd sourcing, provides information that is validated by a global community and is always up-to-date.

As students become adults, they'll continue to go to the internet first for information. They'll make career decisions, political decisions, and life decisions based on what they find. It is vital that we arm students with the skills to question, research and decipher misinformation as it emerges in the wild.

This is not an easy task. But as parents and teachers, here are some of the ways we can help.

1. Build deep, discipline-specific content knowledge

Deep knowledge is becoming more, not less, important in the digital age. Students need deep knowledge to enable them to search for information in a targeted way and to guestion the validity of what they find.

Research shows that people without knowledge in a field are surprisingly poor at finding accurate information on the internet. Even as they are still learning, students with a developing knowledge of the key concepts in a field will spot tell-tale signs when what they read is questionable. To develop deep knowledge, learners should:

- Relate new ideas to their existing knowledge
- Question their existing knowledge and test themselves to determine the limits of their understanding
- Engage in activities that require "difficult decisionmaking" by analysing, evaluating, debating and innovating.

While the resulting state of questioning and confusion can be uncomfortable for some students, it is vital for the deep encoding of knowledge in long-term memory.

2. Build student's information skills

Increasing these skills allows students to unpack assignment questions, identify key search terms and use academic databases and other research tools to locate relevant information.

3. Assist students to critically evaluate the validity of information from a range of sources

Books, blogs, articles and websites are all sources of information that students should become accustomed to critically evaluating by assessing:

- Currency Is the information up to date?
- Focus Who is the intended audience?
- Scope Is the information adequately detailed and relevant to the topic?
- Authority Who are the authors/editors and what are their credentials?
- Accuracy Can the information in the source be verified?
- Purpose What is the author's motivation for publishing the information? Is the content likely to be balanced or biased?

What Sam did next . . .

Sam applied these skills to her assignment. She checked the date of the study in the online journal. The paper was published in 2015, reflecting current scholarship on the subject. The findings were relevant to her assignment so she focussed her attention on authority, accuracy and purpose. The author was a scientist but

did not have experience in the area of nutrition. She read the paper in detail and discovered that a major soft drink producer had sponsored the research. There were a number of other "sponsored" articles in the journal promoting the health benefit of soft drinks in a "balanced diet". This prompted her to look for other research on the topic. She used a range of search terms recommended by her teacher, and using Google Scholar and the school library database she found a number of highly cited papers and government reports highlighting the relationship between high levels of sugar consumption, obesity and chronic disease. She also found evidence that the online journal she had been working from had been criticised for publishing fraudulent articles in the past. This made her question the reliability of the information in her original source - the evidence from other reputable sources did not support it.

Dr Rod Lane and Dr Penny Van Bergen

Dr Rod Lane and Dr Penny Van Bergen are both academics from Macquarie University's Department of Educational Studies. Dr Rod Lane is a Senior Lecturer in Education with expertise in students' misconceptions and strategies for improving understanding, and Dr Penny Van Bergen is a Senior Lecturer in Educational Psychology with expertise in memory and learning.

Source: Originally posted in ABC Education, October 2017



2018 HSC PREPARATION LECTURES FOR YEAR STUDENTS & TEACHERS



DATES AND LOCATION

Tuesday 26 June **Sydney: NSWTF Conference Centre** (Reservoir St, Surry Hills)

TIME

9.30am – 3.00pm, registration from 9.00am

ONLINE REGISTRATION – CLICK HERE

Supply a list of attendees with your school's registration • Registration closes one week prior to each event • Students are encouraged to bring writing equipment and paper or tablet devices to mind map key concepts and advice.

COMPETITION



NSW – Year 7 & 8 Geography Stage 4 'Interconnections' Unit of Work

It's never been easier for students to use and apply spatial technologies.

AUSMEPA is inviting all NSW high schools to participate in the We Are Ports Geography Interconnections high school competition!

A unit of work has been written for you, in line with the National Curriculum.



"Absolutely brilliant work. The best I have seen for the Global Interconnections Unit." Victorian Geography Teachers Association

"We are currently working on the unit. Last week we were able to visit the Port and I am a few lessons into the unit you have written up. The content is relevant, and the kids are enjoying doing and seeing something different. There are lots of geographic skills that they can practice, and the websites and activities are interactive"... Darwin

"Please pass on my congratulations to your writer(s), the tasks engaged my class and stimulated lots of discussion. Fantastic Unit!"Bunbury Senior High School

About the competition

The competition, can begin from Term 1 through to Term 3 in 2018.

The unit of work will also involve a class, group or individual communication project which to be submitted to AUSMEPA and your closest port. The group communication project will be judged by a panel and first place is a prize for the Geography Department of \$1500. At this stage, there will be opportunities to promote the competition and the winners, by the port and the schools.

The unit of work is supported entirely by online data. Everything students need for their learning experience is online. They will interpret graphs, tables of data and manipulate online maps choosing overlays that explain what they intend to communicate. Students will use geography skills to explore, question and discover why ports are a major component of interconnecting places, trade and consumption.

If you and your school is interested in participating, please email Julie. In 2017 other states participated and teachers and students alike loved this unit. For further information and student's submissions see **We are Ports**

Contact

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