

**Flexible
schedule**

Student workshops (Years 4 to 12)

Using Data to Develop our World!

(Statistics in the Data Age)

Enthuse – Engage – Educate

Learning Areas: Maths – Science – HASS – HPE – Tech

Invaluable for Science Extension – Research Projects (& similar syllabi) !!



The why, where & how of Data, Statistics & Investigations (Inquiry Skills).

***From* problem formation, study design & data collection ...**

***to* visual displays, statistical analysis, interpreting & reporting ... and more!**

Real-world examples & free statistical software!

Developing student-led investigations

Interactive online sessions (F2F option in Newcastle, NSW) :

- Authentic learning, conceptual understanding & application!
- 1, 2, 3, 6 & 10-session options – other alternatives on request (session details by Year at ssapostercomp.info/workshops)
- \$12 – \$25^{^^} incl GST per student per session – lower for younger or multi-session groups!
- EOI / Enquiries – contact: info@ssapostercomp.info



Sessions may cover (*with content & number tailored to audience's age and learning area*):

- Statistics, Systems thinking & Scientific Methods in practice – inspiring, accessible, real examples
- The Statistical Investigation Process / Experiments
- Problem-solving cycle & process
- Experimental / Study design – key aspects, e.g., Sampling, Data sources, validity / reliability, Experiments / Observational Studies / Surveys
- What to measure: Turning questions into testable hypotheses – variables & investigations
- Data set construction
- Data Quality & Types of Variables
- Data Exploration & Visualisation
- Visual displays – pitfalls & best practice
- Statistical analyses – single & multiple variables / comparing groups
- Hypothesis testing – t-tests, ANOVA
- Association & Regression
- Reporting – interpreting and engaging
- Use of free statistical software
- ...and more!

^{^^} min. 10 Senior / 20 Junior students to deliver uniquely to your class/school group – bookings per school/group (we can join your students with others to form min. audience numbers if needed)

About the presenter - Dr Peter Howley

Professor of Statistics & Systems thinking -- Award Winning Educator

STEM Professional - Statistical Consultant

ACARA Curriculum Officer -- Director -School Maths Competition

National STA STEM Ambassador

Statistical Education Section Chair - Statistical Society of Australia

Creator - National Schools Poster Comp

See also <https://ssss.org.au/about-the-presenters/>

