

**Flexible
schedule**

Student workshops (Years 7 to 10)

Using Data to Develop our World!

(Statistics in the Data Age)



Enthuse – Engage – Educate

Delivered within the investigation (inquiry) framework!

The why, where & how of Data & Statistics.

Learning Areas supported: Math, Science, HASS, HPE, Tech

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

- Emphasis is on authentic learning, conceptual understanding & application!
- Content age-adjusted per curriculum – content also adjustable by request
- 1, 2, & 3-session options: 1-hour each – modifiable to fit within school period
- \$12 (multi-session) / \$15 (single session) incl GST per student per session^^
- EOI / Enquiries – contact: info@ssapostercomp.info

Session 1:

- The Statistical Investigation Process / Experiments
- Statistics, Systems thinking and Scientific Methods in practice – inspiring, accessible, real examples
- Problem-solving cycle & processes
- Developing student-led investigations
- Types of studies – Experiment, Observational, Survey
- Design: aspects to consider – aim, method, sampling, reflecting variation, visualising, interpreting, reporting
- Data sources & quality: validity / reliability

Session 2:

- What to measure: Developing questions that are answerable – hypotheses and variables
- Types of variables
- Data exploration & visualisation
- Visual displays – pitfalls and best practice
- The 3Ss (incl shape measures in practice)
- Comparing groups
- Designing an investigation – key aspects
- Displaying data, interpreting and reporting

Session 3:

Facilitating student-led investigations

Discussions with each group – exploring and developing their ideas

AND/OR if time permits (OR in place of group discussions)

Introduction to free software (data set construction) / higher level aspects (on request).**

*****please consider aspects in the suggested six-session option for Seniors***

^^ min. 20 students to deliver uniquely to your class/school group – bookings per school/class (payable to Hunter Innovation and Science Hub)

- 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/>

