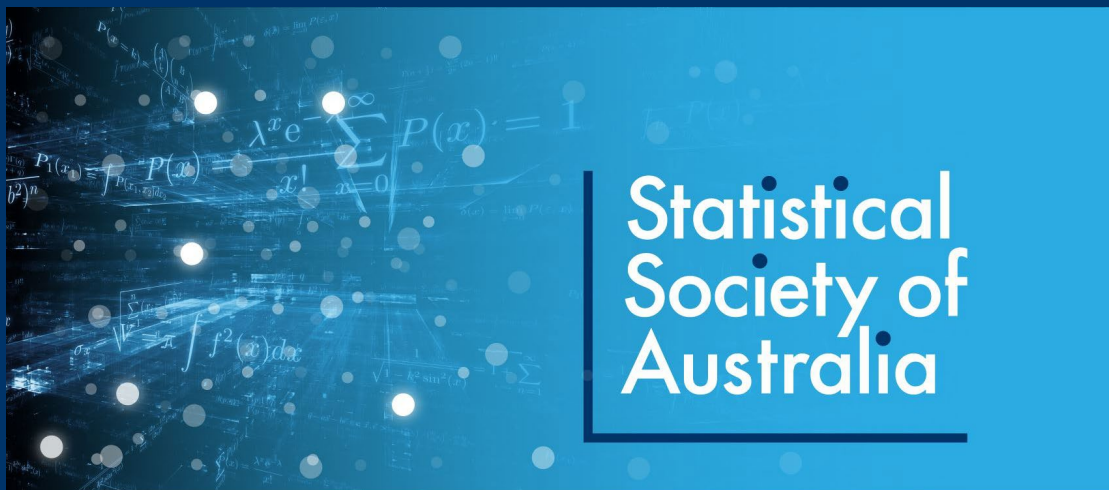


From: [Statistical Society of Australia](#)
To: [Contact us](#)
Subject: Stats Matters & Events
Date: Thursday, 10 August 2023 4:24:09 PM



STATS MATTERS & EVENTS

10 August 2023

Mathematics is often surrounded by an air of intimidation, with many students – young and old alike – grappling with feelings of fear or anxiety when it comes to learning this subject. However, fostering a positive attitude towards math is crucial for a person's holistic development. Encouraging children not to be fearful of learning math can lead to numerous benefits that extend far beyond the classroom.

As you are aware mathematics is an integral part of everyday life, from budgeting and cooking to technology, engineering and health. Overcoming math fear equips children with the skills they need to navigate these practical applications confidently. A solid understanding of math empowers them to make informed decisions, solve real-world problems and succeed in various professions.

I'm guilty of not recognising this when I was younger, even when I was in my thirties and forties, raising our children. As a result, they grew up not giving math the credit it deserves, but more importantly not believing in their own mathematical capabilities. Fifteen years working for SSA have taught me to do better.

Yesterday, I had a wonderful experience when my daughter sent me a Snapchat message while attending a uni course (she's doing a BA in Social Work). The message contained a photograph of a screen showing some complicated-looking statistical equation, and then a photograph of her own panicked face.

I texted back calmly that she could do it and reminded her that she's done much more difficult stuff in the past. I didn't turn it into a big thing, a "poor you" matter, or "How can they possibly expect you to solve this?".

A short time later I received another message from her: "I did it!", quickly followed by "I'm a statistician!"

I wouldn't go that far, but I was very pleased to read it. Attitude is everything and as parents, we can play a significant role in shaping our children's mindset.

[Marie-Louise Rankin](#)

Executive Officer

Read newsletter in your [browser](#)

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Exploring Innovation: National Science Week Australia 2023

Australia is eagerly gearing up for [National Science Week](#), an annual event celebrating the marvels of science, technology, engineering, and mathematics (STEM). Running from 12 August to 20 August 2023, this year's event

promises an exciting array of activities that underscore the significance of scientific discovery and innovation in our lives.

With the theme "Innovate, Investigate, Inspire," National Science Week 2023 encourages people of all ages to dive into scientific exploration, kindling curiosity about the impact of science on our daily lives and the world's future.

Interactive exhibitions and hands-on workshops across the country are a highlight. Virtual reality experiences will immerse participants within the human body, while outdoor astronomy sessions unveil the cosmos' mysteries. These events not only entertain but also enlighten, making intricate scientific concepts accessible.

The event acknowledges the contributions of Australian scientists and researchers. Expert-led talks and panel discussions will shed light on cutting-edge discoveries, inspiring aspiring scientists and engaging the public in meaningful scientific discourse.

From schools to universities, museums to community groups, everyone is joining the celebration. Schools will host science-themed art displays and interactive challenges, engaging students in real-world problem-solving. National Science Week is an inclusive platform to nurture scientific curiosity.

In today's world, scientific literacy is vital for informed decisions. National Science Week Australia 2023 acts as a beacon of enlightenment, inviting us to marvel at the natural world, comprehend scientific advancements, and envision an innovative future. Save the dates to embark on this year's National Science Week journey.

[Find an event near you](#)

SSA and ASPAI AGMs and Q & A for the Strategic Plan

24 Aug 2023, 5:30 PM – 7:30 PM (AEST), online

You are invited: SSA and ASPAI AGMs - 24 August 2023- SSA Members only

The 2023 Annual General Meetings of the Statistical Society of Australia, Inc and the Australian Statistical Publishing Association Inc will be held on Tuesday, 24 August 2023 from 5:30 pm to 7:00 pm AEST via Zoom.

The meeting documents, including the agenda, can be found [here](#).

The AGMs will be followed by a presentation commencing at 6:15 pm AEST.

SSA President, Professor Ian Gordon will be discussing the recently announced [strategic plan](#), followed by a Q&A session and also give a brief talk on the estimation of total amounts of loss in class actions.

Register [here](#).

Mathematics makeover: unveiling the creative shift in modern math education

A recent article, co-authored by [Benjamin Zunica](#), [Bronwyn Reid O'Connor](#) and [Eddie Woo](#) and published in the “The Conversation”, addressed a question that you may have well asked yourself on occasion: ‘Why would they change maths?’ It goes on to explain how your child’s maths education might be very different from yours.

Over the past three decades, the methods of teaching and learning mathematics have undergone a significant transformation. Unlike the past focus on teaching procedures like memorising times tables, modern mathematics education emphasises forming mental connections between concepts. This shift recognises the need for students to transfer their mathematical understanding to complex, unfamiliar scenarios, requiring them to do more than just apply formulas for correct answers. The evolving approach emphasises problem-solving, reasoning, and logical thinking.

Mathematics education now prioritises several proficiencies, including understanding mathematical concepts and procedures, efficiently and accurately applying mathematical concepts, tackling challenging questions with less obvious solutions, and honing skills in logical thought and strategic justifications. Teachers encourage students to approach mathematical problems creatively and provide various representations to promote deeper understanding, reasoning, modeling, and mathematical thinking.

This transformation also aligns with technological advancements, as computer technology plays an integral role in modern education. Dynamic geometry software enables visualisations of graph transformations, enhancing comprehension of variables and their application across different graphs. Animation aids in understanding complex formulas, such as solids of revolution, making concepts clearer than traditional whiteboard explanations.

Parents are advised to embrace these changes and to understand that there are reasons why their children are being taught math differently than they were. Asking thoughtful questions about the methods and reasoning behind their children's learning can foster understanding, reasoning, and communication skills. This collaborative approach can help identify areas

needing improvement while allowing parents to enhance their own mathematical skills.

[Read the original article here](#)

Lethal threat or saviour – how do you see Artificial Intelligence (AI)?

Confused about the potential benefits of AI vs the threats? Using easy-to-understand language, this video provides fascinating insight into AI progress and where it may take us, for better or for worse.

[Take a look](#)

Have you been to SSA's Career Centre?

At SSA's Career Centre, we understand the challenges of job searching, and we're here to help! Our career centre stands out by offering you a wide range of advantages that set us apart from generic job boards.

Here's how:

Your personalised portfolio: Go beyond a standard resume. Showcase your skills, accomplishments, and work samples in a visually appealing and professional manner. Not only does this help you stand out to potential employers, but it also makes your skills completely searchable (while maintaining your anonymity).

Networking opportunities: Connect with a vibrant community of professionals, recruiters, and employers, creating ample networking opportunities for you. Networking is a powerful tool in today's job market, and the SSA Career Centre facilitates meaningful connections that can lead to new job prospects and industry insights.

Exclusive access to unposted jobs: Gain access to exclusive job openings that are only available to our community. This advantage opens doors to hidden opportunities and gives you a competitive edge in your job search.

Job folder: Save jobs that interest you and jobs that you have applied for. For jobs you have applied for, you may even write and save notes about the position. Managing your online job search has never been easier.

Your dream job is just a step away with the SSA Career Centre's dedicated

support and personalised services. We look forward to helping you take the next steps toward your dream job!

Career Centre advantages start here

Mentioned in previous newsletters:

SSA Branches have opened applications for funding to attend ASC/OZCOTS 2023

Branches of the Statistical Society are offering funding for student and early career members of the society to attend the [Australian Statistical Conference \(ASC\) and Australian Conference on Teaching Statistics \(OZCOTS\)](#) in Wollongong, 10th - 15th December 2023. All branch funding will cover registration to the conference, with some branches covering additional travel if funds allow. For full details see each branches' announcement.

- Canberra (check your email for 'Canberra branch ASC & OZCOTS 2023 rego grant')
- NSW ([application form](#))

With best wishes,

ASC & OZCOTS 2023 Programming Committee

SSA Events

Statistical Consulting Network July Meet-Up

25 August 2023, 12:30 PM – 1:30 PM AEST, held online

Come along with your thinking cap, maybe a problem, and some lunch!

The Statistical Consulting Network invites you to their monthly meet-up, a virtual lunchtime meeting where statisticians help each other out with problems that they aren't sure how to deal with. This virtual meeting is held on Zoom at lunchtime on the last Friday of each month, 12:30-1:30 PM (AEDT). We start each meet-up with announcements, or occasionally a special topic discussion, then discuss problems that attendees have brought along with them.

We also have a Slack workspace where members of the consulting network can communicate between meetings, or post problems or relevant materials they would like to discuss during a meeting.

[Zoom link](#)

Password: 660145

[Slack Workspace link](#)

SSA Vic & Tas Branch August meeting: Applications in long-term forecasting, derivatives' valuation, anomaly detection, and machine learning presented by Dr Zili Zhu is the Director of RiskLab at CSIRO

15 Aug 2023, 6:00 PM – 7:00 PM (AEST), RMIT Building 15, Level 3, Room 10, 124 La Trobe Street Melbourne OR online via Teams

At RiskLab, our objective is to develop and implement innovative quantitative solutions and/or products for the industry. The methodologies that we rely on are in the domains of applied math, statistics and software engineering. In this talk, we will present some examples derived from our direct engagement with industrial clients to illustrate some typical techniques and methods that we have implemented for applications in long-term forecasting (actuary), derivatives valuations (finance and agriculture), anomaly detection (fraud risk) and machine-learning (high-frequency algorithmic trading).

To register click [here](#).

SSA NSW August event: A/Prof Anastasios Pangiotelis - Forecast Reconciliation: A Review by A/Prof Anastasios Pangiotelis and Paco Tseng.

16 Aug 2023, 5:30 PM – 7:30 PM (AEST), Seminar Room 020, Law Building Annex, The University of Sydney or [online](#).

Collections of time series that are formed via aggregation are prevalent in many fields. These are commonly referred to as hierarchical time series and may be constructed cross-sectionally across different variables, temporally by aggregating a single series at different frequencies, or may even be generalised beyond aggregation as time series that respect linear constraints. When forecasting such time series, a desirable condition is for forecasts to be coherent, that is to respect the constraints. The past decades have seen substantial growth in this field with the development of reconciliation methods that not only ensure coherent forecasts but can also improve forecast

accuracy. This talk will serve as a review of forecast reconciliation and an entry point for researchers and practitioners dealing with hierarchical time series. The talk will include perspectives on forecast reconciliation from machine learning, Bayesian statistics and probabilistic forecasting as well as applications in economics, energy, tourism, retail demand and demography.

For more details and to register click [here](#).

Trivia with SSA Vic & Tas

22 Aug 2023, 6:00 PM – 9:00 PM (AEST), Prince Alfred Rooftop and Bar, 191 Grattan St, Carlton VIC 3053

Join us for dinner and trivia at the Prince Alfred in Carlton! Trivia starts at 7pm but we will be arriving at 6pm to allow time for us to order food and have a chat before trivia starts.

If you're a member of the Vic & Tas branch you'll get a free drink. Food and subsequent drinks will be at your own expense, but the fun will be free!

To sign up click [here](#)

SSA QLD Branch Meeting: Collecting and Analysing Data through the Lens of a Behavioural Economist Presented by Professor Benno Torgler

23 Aug 2023, 5:00 PM – 6:30 PM, 0500D-0M14 - UQ Brisbane City, 88 Creek Street, Brisbane/Online

Like a breath of fresh air, the expansion of economics and behavioural economics has moved into all kind of spheres of life, including sports, the science of science, warfare, crime and more. This presentation will provide insights on how we have tackled some of those areas (exploring data on sports athletes, scientists, soldiers, or citizens) while discussing both advantages and shortcomings. Moreover, It will explore future avenues for potential progress in terms of data and tools of thought and exploration.

To register click [here](#).

Bill Venables Award seminar

24 Aug 2023, 12:00 PM – 1:00 PM (AEST), online

SSA's Statistical Computing and Visualisation section proudly presents the Venables Award seminar.

This award is to encourage new open source software development from the Australian community with a view to support efforts to develop and share data science and statistics methodology. This year's winners are Matthew Sainsbury-Dale, Andrew Zammit-Mangion, with FRK: Fixed Rank Kriging. Runners-up are Rex Parsons, Robin Blythe, Adrian Barnett, Susanna Cramb and Steven McPhail, with predictNMB.

To register and see more information click [here](#).

Sampling course

12 Oct 2023, 9:00 AM (AEDT) – 8 Dec 2023 (AEDT), held online, one hour a week

The Social Research Centre and the Statistical Society of Australia (SSA) are very proud to offer statistical training from the International Program in Survey and Data Science (IPSDS), a joint program of the University of Mannheim and the Joint Program in Survey Methodology at the University of Maryland.

The 8-week online sampling course is aimed at working professionals who are interested in expanding their data collection skills. The course will be available fully online with prerecorded videos that students are expected to watch on their own time plus weekly 1-hour live interactive sessions with the instructor, Raphael Nishimura, Director of Sampling Operations at the University of Michigan.

By the end of the course, you will...

- understand the basic ideas, concepts and principles of probability sampling from an applied perspective
- be able to identify and appropriately apply sampling techniques to survey design problems
- be able to compute the sample size for a variety of sample designs
- understand and be able to assess the impact of the sample design on survey estimates
- be able to estimate the precision of the survey statistics using different estimation techniques

Please book before 15 August 2023 to take advantage of the Early Bird Deadline. For more details and to register click [here](#).

Check out these pre-conference workshops held in Wollongong on 10 December 2023:

- [Essential Skills for Statistical Communication](#) presented by Professor Sir David Spiegelhalter, University of Cambridge and Dr Linden Ashcroft, University of Melbourne

The workshop will include a panel discussion. Presenters Prof David Spiegelhalter and Dr Linden Ashcroft will be joined by applied mathematician and science communicator [Dr Sophie Calabretto](#), and ABC journalist and 'lapsed mathematician', [Casey Briggs](#), to share their experiences.

- [Statistical Consultancy – The Essentials for Getting Started and Ongoing Success](#) Presented by Professor Julie Simpson, University of Melbourne, A/Professor Emily Karahalios, University of Melbourne and A/Professor Karen Lamb, University of Melbourne, A/Prof Sue Finch from The University of Melbourne and
- [Deep Statistics for More Rigorous and Efficient Data Science](#) presented by Professor Xiao-Li Meng, Harvard University

[Australian Statistical Conference \(ASC\) and Australian Conference on Teaching Statistics \(OZCOTS\)](#)

10th - 15th December 2023, Wollongong



ASC and OZCOTS 2023 Social Events

[Early Career and Student Statisticians Network ASC Social](#) on 12 December 2023, held at the Illawarra Brewery's outdoor terrace at WINN stadium. The ECSSN is organising a social get-together during the ASC2023!

They are inviting students, early career and more senior statisticians to join them a lovely beach view and network with like-minded people you might not see very often, plus have some fun, nibbles, and drinks!

[Statistical Conference Dinner](#) on 13 Dec 2023, at the Grand Ballroom at the Sage Hotel. Just minutes from the beach, come and join us for a three-course dinner. (You register on the same page as the conference registration page)

[OZCOTS 2023 Social](#) on 14 Dec 2023, at Lucia's by the Sea, next to the Novotel Hotel. The OZCOTS committee invites you to come and join them for a lovely meal and catch-up at a beautiful beach front venue.

Other events

From the Convener of ICME

One of the many focal points of the 15th International Congress on Mathematical Education is to create a inclusive event at which people who are passionate about mathematics and statistics education can come together and connect with like-minded colleagues from around the globe to create lasting local, regional, and global legacies in our field.

Our team has been planning to ensure that this congress incorporates initiatives to that align with our inclusive and sustainable goals. Legacy alongside Indigenous themes are at the forefront of planning. The Committee is excited to share the unique culture and history that Australian First Nations have to offer. We've just released our next instalment in [ICME-15 Announcements](#) which goes into detail about ICME-15 initiatives and encourage you to download and share with colleagues.

Sydney, renowned for its vibrant culture, awe-inspiring scenery, and rich history, is the ideal host city for this prestigious international gathering. In addition to the engaging scientific program, we have an exciting lineup of social events and excursions planned, providing you with an opportunity to immerse yourself in the best of this magnificent city and its surroundings. The networking opportunities during your stay in Sydney will undoubtedly lead to valuable and lasting connections.

Mark your calendar and make plans to be part of ICME-15 from July 7th to 14th, 2024, in Sydney. Come and be counted with us!

Warm regards,

Kim Beswick

Convenor ICME-15
Professor of Mathematics Education
Head, School of Education
The University of New South Wales

How to sustainably improve your productivity

Are you looking for ways to increase your productivity while maintain a sense of work-life balance?

Improving our productivity can help us to accomplish our goals more quickly and efficiently and can supercharge our professional growth so we can tackle more challenges more effectively. Ideally, increased productivity can also reduce our stress and improve our overall well-being by giving us a sense of accomplishment and increased control over our lives.

But, in the face of increasing burnout in the workplace, how can we achieve the productivity we want without depleting all our energy? In this [Ways to Improve Your Productivity, Sustainably webinar](#) you will learn ways to achieve this including:

- Habits of productive people
- The neurobiology of productivity
- Ways to increase motivation and drive
- Easy to implement productivity hacks

The expert speaker, Liana Busoli, is an experienced psychotherapist specialising in trauma and staff burnout. She brings a wealth of knowledge, experience, and practical insights that will enable you to walk away with useful strategies you can apply immediately.

Webinar Details:

- Date: Wednesday 23 August
- Time: 12pm-12.30pm (AEST)
- Duration: 30 minutes
- Recording: A link to the recording will be emailed to registrants after the webinar.

This is a free event organised by [Strategic Membership Solutions](#).

[Click here to register your place](#) and take advantage of this valuable opportunity to hear practical advice from an expert in this area.

Current Vacancies in SSA's Career Centre

[Revenue Officer- DIRECT HIRE \(12 Month Register\)](#)

Multiple Locations (see description)

Internal Revenue Service

Duties WHAT IS THE DIVISION? SMALL BUSINESS ...

[Internal Revenue Agent \(Examiner\) - Direct Hire \(12 Month Register\)](#)

Multiple Locations (see description)

Internal Revenue Service

Duties WHAT ARE THE APPEALS (AP), LARGE BUSINESS ...

[Internal Revenue Agent \(Examiner\) - DIRECT HIRE \(12 MONTH REGISTER\)](#)

Multiple Locations (See Description)

Internal Revenue Service

WHAT ARE THE APPEALS (AP), LARGE BUSINESS AND ...

[View All Jobs](#)

If you have news from the Australian statistical community to share in Stats Matters and Events, please get in touch [with us](#)! We love getting feedback too.

[Unsubscribe](#)