

Inspiring Victoria 2023



Program Performance & Financial Acquittal to the Victorian Department of Education

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Governance & Management in 2023

2023 continued under the governance of the Inspiring Victoria Partnership Board, led by Dr Gillian Sparkes AM, Commissioner for Environmental Sustainability (pictured left), on behalf of the State of Victoria.

The Board consists of representatives from public institutions and community knowledge networks concerned with enabling broader engagement by Victorian communities with scientific knowledge and expertise.



Inspiring Victoria Partnership Board Members, 2023

Dr Gillian Sparkes AM, Commissioner for Environmental Sustainability, Government of Victoria - Chair

Dr Catriona Nguyen-Robertson (Senior Editor, *Royal Society of Victoria* & Senior Tutor in Science Communication, *The University of Melbourne*) – Executive Officer

Mr Mike Flattley - CEO, Royal Society of Victoria & Manager, Inspiring Victoria

Dr Angela Savage - CEO, Public Libraries Victoria

Mr Cameron MacRae - COO, Neighbourhood Houses Victoria

Mr Andres Lomp - Community Engagement Officer, Parliament of Victoria

Ms Kate Phillips - Senior Curator, Science Programs, Museums Victoria

Ms Émer Harrington - Head of Programming & Audience Development, Royal Botanic Gardens Victoria

Ms Mel Wyatt - Senior Manager Education, Zoos Victoria

Ms Fern Hames - Director, Arthur Rylah Institute for Environmental Research

Dr Sparkes completed her tenure as Chair at the last meeting of 2023, handing over to incoming Chair **Dr Djuke Veldhuis** (pictured right), Director of the Advanced Science – Global Challenges program at Monash University and a Councillor of the Royal Society of Victoria. The Board also welcomed **Ms Joanna Phillips**, Executive Director of the Science Teachers Association of Victoria, to the Board at the last meeting.



Programs & Activities in 2023

Targeted Science Engagement

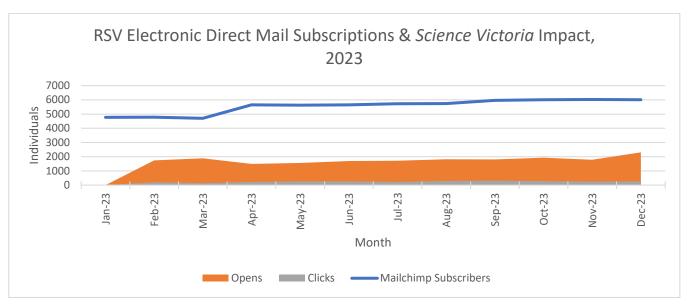
Science Victoria Magazine

The magazine was taken to another level of design and content quality over the course of the year, with the publications team producing 11 high-quality editions from February to December, drawing on contributions from across Victoria's science community.



Even for a free publication, building a mailing list of subscribers is a hard road and maintaining it is even harder — individual email inboxes are commonly bursting at the seams with newsletters, promotional material, scams and obscure updates, with the "unsubscribe" link only ever a click away, so we work hard to keep our language and content relevant and engaging for our readership, while seeking to grow the mailing list through sign-up forms and event registration processes.

We publish the digital magazine <u>online</u>, posting the PDF to LinkedIn and distributing to email subscribers using Mailchimp. The mailing list's audience engagement over time is measured in the graph that follows, showing growth in subscription rates along with the rate at which our emails are first opened, then an item clicked on by a reader to inspect further online. Our subscriber base grew from 4773 in January to 6004 in December 2024.



STEM and Society: Women and Girls in Science – 11 February 2023

Inspiring Victoria facilitated a celebration of the International Day of Women and Girls in Science (11 February) at Parliament House as a part of the "STEM and Society" program, in partnership with the Parliament of Victoria and the Commissioner for Environmental Sustainability.

Joining science journalist and presented Natasha Mitchell to discuss barriers to women's participation in science, technology, engineering and mathematics in Australia were:

Dr Isabelle Kingsley

Research Associate, Office of the Women in STEM Ambassador, based at UNSW

Professor Madhu Bhaskaran

Co-Chair, Women in STEMM Australia & Co-Leader, Functional Materials & Microsystems Research Group (RMIT University)

Dr Marguerite Evans-Galea AM

Director, STEM Careers Strategy, Australian Academy of Technology & Engineering

Associate Professor Sophie Adams

Medical Director, Mental Health Division at Austin Health



Video (Parliament of Victoria): https://youtu.be/TXT7RWXVx9w

"Science in Focus" Program

In 2023 we continued to offer our 'hybrid' format, combining in-person lecture attendance with live broadcast via Zoom webinar and YouTube. We enjoyed an excellent line-up of speakers and topics, professionally filmed and delivered to audiences in person and online through the welcome support of the Inspiring Victoria program.

All presentations can be viewed from the RSV's YouTube channel: https://www.youtube.com/c/TheRoyalSocietyofVictoria.

22 June: Glaciers & Ice Sheets in a Warming World

 Professor Andrew Mackintosh, Head, School of Earth, Atmosphere and Environment, Monash University



7 July: Reinventing the Chemical Industry with Green Chemistry

- Dr Paul T. Anastas, Director, Center for Green Chemistry and Green Engineering, Yale University
 - Dr John Warner, Distinguished Professor of Green Chemistry, Monash University



13 July: Decolonising Fire Science

Adjunct Associate Professor Philip Zylstra, School of Molecular and Life Sciences, Curtin University



20 July: Ockham's Razor LIVE at the Royal Society of Victoria

Presentations from Victorian scholars hosted in partnership with ABC Science, who recorded our speakers for the Ockham's Razor program on the Radio National and podcast series hosted by journalist Tegan Taylor.

Presentations featured:

Ms Tilly Boleyn (Science Gallery Melbourne) – The Giant Urine Battery, and Other Art-Science Fusions

Dr Jarrod McKenna (University of Melbourne) - Advancing Women's Health with Mice

Ms Krystal De Napoli (Monash University) - Why Would we Need a Celestial Lighthouse?

Associate Professor Rashina Hoda (Monash University) – When Al Surprises a Software Engineer

Professor Brendan Wintle (University of Melbourne) – <u>Big Conservation in Small</u>

Dr Susi Seibt (CSL Behring) – What Microfluidics Can Do for You Dr Flora Hui (Centre for Eye Research Australia) - A Peek Into the Future of Glaucoma Treatment

Ms Trish Kerin (IChemE Safety Centre) - Safety, Science and a Platypus



28 September: The Young Scientist Research Prizes

Open to students in the final year of their PhD candidature at Victorian research institutions, in 2023 there were 54 entries across all four categories: Biological Sciences (non-human), Physical Sciences, Earth Sciences and Biomedical & Health Sciences. Eight were selected to compete for first and second prizes in each category, assessed on the quality of the research presented, and the ability of presenters to communicate their work to a non-scientific audience.

Prize Winners 2023

Biological Sciences

First Prize: Sarah Mele, Monash University (left)

Defining diets to treat amino acid metabolism disorders

Second Prize: Ella Plumanns Pouton, The University of Melbourne (right)

The mechanisms through which fires shape plant life cycles



Biomedical and Health Sciences

First Prize: William Kwan, Monash University (left)





Earth Sciences



First Prize: Wenjing Yu, La Trobe University (left)

Combined US-ESR dating of mammal teeth at Taung, Cradle of Humankind, South Africa

Second Prize: **Estefania Montoya Duque**, The University of Melbourne (right)

Unravelling the Mysteries of Clouds over the Southern Ocean: The Key to Improving Climate and Weather Predictions



Physical Sciences



First Prize: **Grace Lawrence**, Swinburne University of Technology

Dark Matter within Simulated Milky Way Analogues and the Subsequent Direct Detection Possibilities on Earth

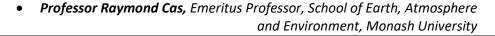
Second Prize: **Thulya Chakkumpulakkal Puthan Veettil**, Monash University

Vibrational Spectroscopic Approaches for Leishmaniasis Disease Diagnosis



All finalists were each presented with a prize certificate by RSV President, Mr Rob Gell AM. The first prize winners received prize money of \$1,000, with second prize winners each receiving \$500.

7 September: Understanding Climate Change: All the Natural and Human Causes





19 October: Reimagining Humanity in the Age of Generative AI

Dr Muneera Bano, Senior Research Scientist, Data61, CSIRO



2 November: Aiming Higher - Improving Science Education in Victorian Schools

Speakers:

- Professor Amanda Berry, Professor of STEM Education and Associate Dean Research & Innovation, School of Education, RMIT University
 - Professor Jan van Driel, Professor of Science Education, Faculty of Education, The University of Melbourne

Panellists:

- - Dr Brendan Rigby, Director of Tech Schools and Performing Arts,
 Victorian Department of Education



Public Libraries Victoria – Science & Sustainability

With the support of Inspiring Victoria, this project will support library services to share a wide range of resources and case studies to provide their communities with the best chance to become more environmentally sustainable, in line with the aims of the Sustainable Development Goals.

This project will empower libraries and their communities to engage in environmental sustainability efforts, inspire local action and increase public understanding of science through three key focus areas:

- Development of a suite of sustainability resources on a user-friendly portal for libraries and the public to access.
- Hosting and marketing networking events and opportunities including, but not limited to, National Science Week and on World Environment Day annually.
- Development and implementation of resources to support public libraries across Victoria to understand, and report on, their contribution to the UN SDGs.

The portal will highlight key programs, partnerships, policies and initiatives that all libraries can easily adapt and translate into their service. The key goal is supporting the library community to increase their science knowledge and interest to become more environmentally sustainable, and spotlighting library services who make a positive impact to inspire sustainability in other library services.

A report on progress to date is provided as **Appendix A**.

Number of Programs/Events **Number of Participants** Targeted Science Engagement Audiences Number of Programs/Events

Targeted Science Engagement – Events & Participants

Despite the smaller number of events and programs held outside National Science Week in 2023, the concentration of effort on online delivery and promotion enabled a far larger audience reach (40,503 participants). Note these figures do not reflect the impact of subsequent Ockham's Razor broadcasts due to a lack of access to the ABC's distribution data.

National Science Week

The Main Event: SOCIAL ANIMALS.



Social Animals was a series of special events held at Science Gallery Melbourne in collaboration with the Royal Society of Victoria as our State's main program for National Science Week.

Young people interviewing academics, a scientific showcase, speed networking, open studio, comedy debates and a banging party; everything we are doing is about bringing us back together to socialise and have fun. After all, we are Social Animals. All events were free and open to everyone.

Program Highlights

Kids vs Science

Saturday, 12 August, 2023

A panel of young people aged 8-16 years interviewed a revolving door of acclaimed scientists about their research and passions. Sparks flew and views collided as the tough questions were asked that can only come from a generation born with mobile phones and access to early-stage AI. Featuring Saskia Ellis-Gardam, Ned Foletta, Hugo Lethbridge-Ford, Spencer Maxwell, Harriet McNicol and Zara Nawaz.

STEMX Speed Networking: For Women and Gender Diverse Humans Tuesday 15 August, 2023



This event supported diversity and inclusion in the STEM fields by focusing on connecting women and gender diverse people together. A speed-meeting event where providing a unique opportunity to connect with industry-leading women working in STEM in direct conversation, bringing together people from research, major technology

companies, engineering firms, media, and academia with young people from across Melbourne for intimate conversations on their careers.

Social Animals Party: National Science Week

Wednesday 16 August, 2023

A late-night exhibition viewing of the exhibition DARK MATTERS, some naughty zebras from Born In A Taxi, talks, wild decorations, live music, food, drinks and a toast to celebrate being together again after years of pandemic.

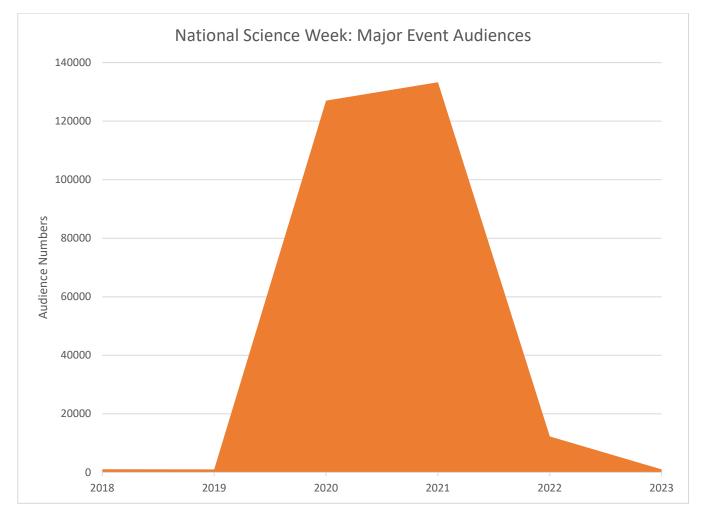
Citizen Science and Art Collide with Muon Open Studio

Friday, 18 August to Saturday, 19 August

Artist Jon Butt and collaborator Lewis Gittus developed a live-sound lab at Science Gallery Melbourne, using Jon's DIY particle detector as an adaptive musical instrument. The duo created a soundtrack using muon detections made on site, allowing interstellar particles to form musical passages.

Sci Fight Science Comedy Debate: "We Should Embrace Our Animal Nature" Saturday 19 August, 2023

Six human animal scientists and debaters wrestled with this existential question of who we are, and how we can be happy. We are animals. We may have pulled ourselves out of the primordial muck by our bootstraps. We may have invented sophistications such as chess, quantum mechanics and the Nutbush. We may have developed consciousness, closely followed by curiosity, hope, and existential despair. But have we forgotten our roots?

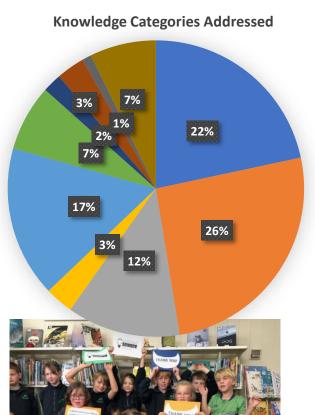


With the Science Gallery program conducted entirely in person without broadcast or filmed elements to share online, the major event audience was constrained to 1010 physical attendees in 2023.

Statewide Program

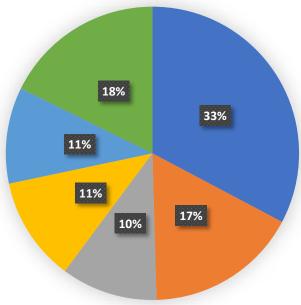
National Science Week - Community Seed Grants in 2023

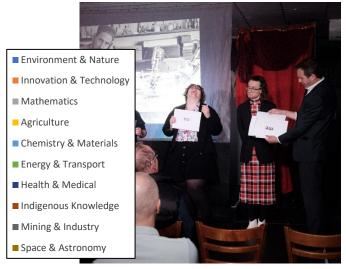
38 small grants were allocated through the Royal Society of Victoria to public libraries, neighbourhood and community houses and a number of incorporated community organisations across the State of Victoria.



Participating kids wrapping up a session at Corangamite Moyne Library Services on "Create a working computer with anything, even playdough!"

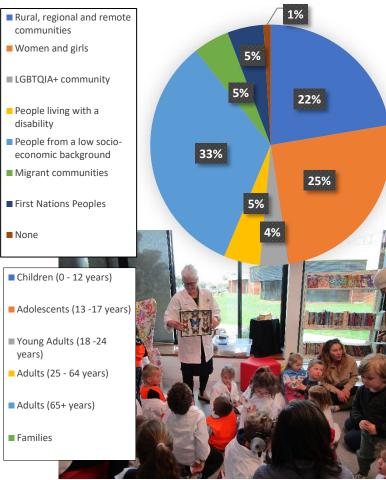
Target Audiences: Age Groups





Sean Elliott guides audiences through the functioning of Language Learning Model AI for Pint of Science's "This Play was Written by ChatGPT"

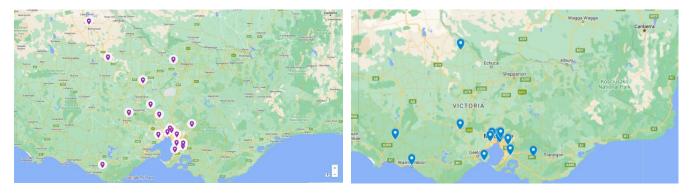
Target Audiences: Groups Underrepresented in STEMM Studies & Workforce



Twisted Science presenting "Meet Einstein" to 70 children and carers at Campaspe Library

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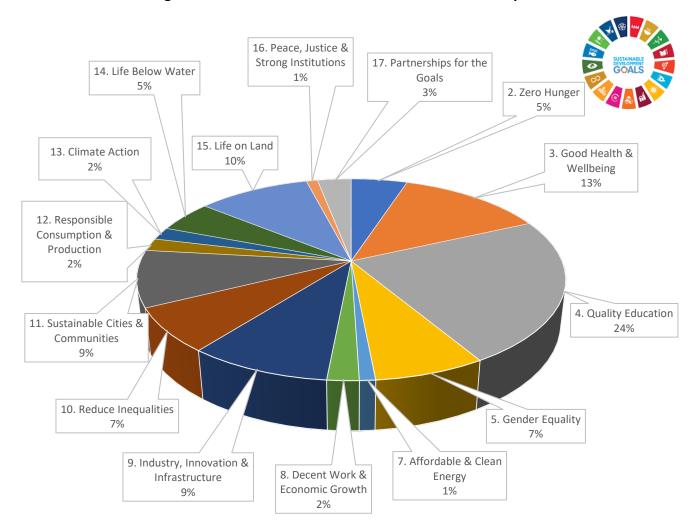
Two grant programs stimulated statewide activities for National Science Week via our two participating network partners: Neighbourhood Houses Victoria (left) and Public Libraries Victoria (right), the latter of which also took in community organisations such as regional museums and astronomical societies.



Topic categories across the 38 events were overwhelmingly concerned with "Innovation and Technology," "Environment and Nature" and "Chemistry and Materials" across the board. These targeting rural and regional communities, women and girls, and people from a low socio-economic background, with a strong focus on children and families.

Details of grant recipients across two community network programs – one for Public Libraries Victoria, and another for Neighbourhood Houses Victoria – are provided as **Appendix B** and **C** respectively.

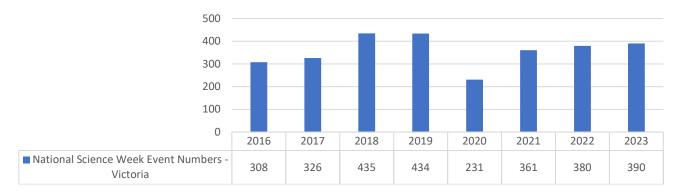
Grant Alignment with the United Nations' Sustainable Development Goals



Across 38 events directly supported through grant making, all targeted at least one Sustainable Development Goal, as above. Notably, "Quality Education" emerged as the dominant Goal addresses, followed by "Good Health & Wellbeing," "Life on Land," "Sustainable Cities & Communities" and "Industry, Innovation & Infrastructure."

National Science Week – Outcomes for Victoria

We managed a small increase on 2022 numbers, coming in at 290 registered events. A longer lead-in with the certainty of program funding will hopefully help encourage more people to conduct National Science Week activities in 2024.



Social Media

We take a snapshot of social media activity from May to August each year, capturing the typical campaign period for raising community awareness of upcoming Science Week activities.

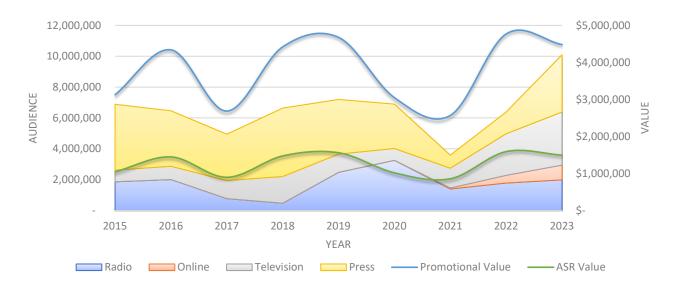


The Society has directed less funding to advertising via social media in 2022 and 2023 in favour of grant making, meaning reach has been derived through predominantly "organic" posts. This has clearly had a negative impact compared to performance in 2021, particularly given the increase in total followers. The demise of Twitter/X and Facebook as platforms that deliver audience impact is now very clear, and the RSV has ceased use of its Twitter/X account following this result.

Media Impact

Interest from Victorian press media outlets shows encouraging signs of recovery to pre-pandemic levels, while television and radio coverage of Victorian events and initiatives has grown. In addition to audience reach, we include both promotional values (typically three times the advertising value) and advertising sales rate value as a crude indicator of return on investment.

National Science Week Media Impact (Victoria), 2015-2023

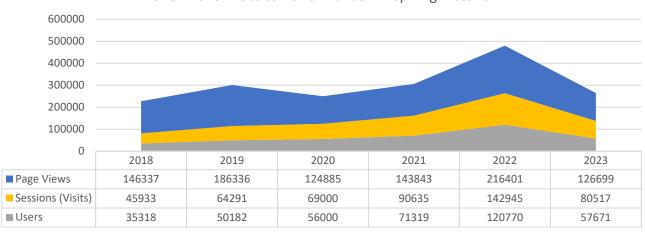


2023 coverage of National Science Week in Victoria reached a cumulative audience of 10,089,040 people, with a total promotional value of \$4,480,074. The 2023 media monitoring report from Isentia is included at **Appendix D**.

Whole-of-Program Impact

Website

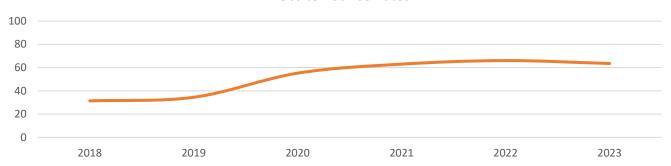
Articles from Science Victoria are published on the Royal Society of Victoria's website, along with video footage of presentations from the "Science in Focus" series, National Science Week seed grant opportunities, event registrations and competition submissions. The graph below shows the strong growth in audience engagement with our website's content up to 2022, when we welcomed over 120,770 unique visitors – 2023 did not reach that high but remains a comparatively good outcome historically.



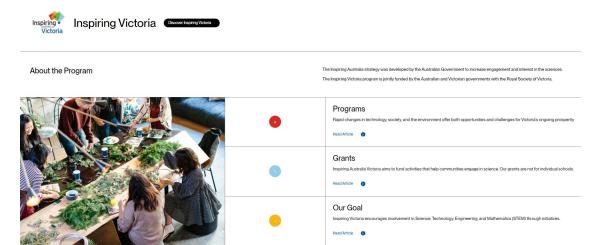
2018 - 2023 Website Performance - Inspiring Victoria

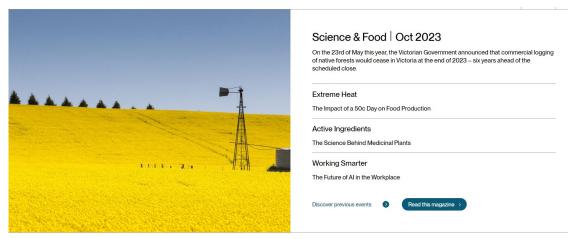
The graph below shows the "bounce rate," or the number of visitors who viewed only one page on our website without noticing or showing interest in any other content. Essentially, a low bounce rate is "good." Given our data reveals that users visit our site for many different reasons, it appears the design and "flow" of our websites is not attracting the sustained interest of our readership; we commissioned the review, redesign and relaunch of the website as a part of the Inspiring Victoria program from 2023, with the initial redesign now complete. Work remains to be completed on content migration and URL redirections by RSV staff.

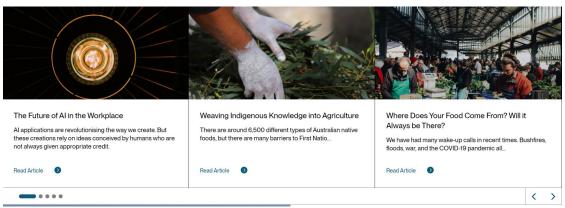




Snapshots of the new website design currently in development:

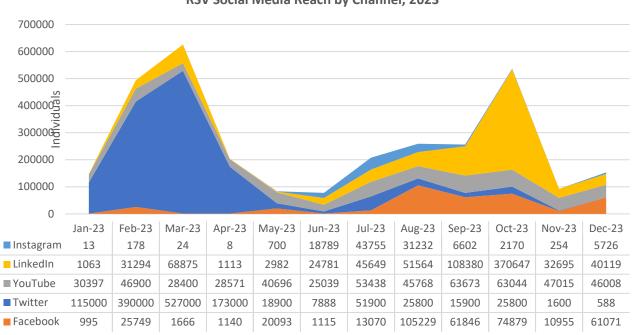






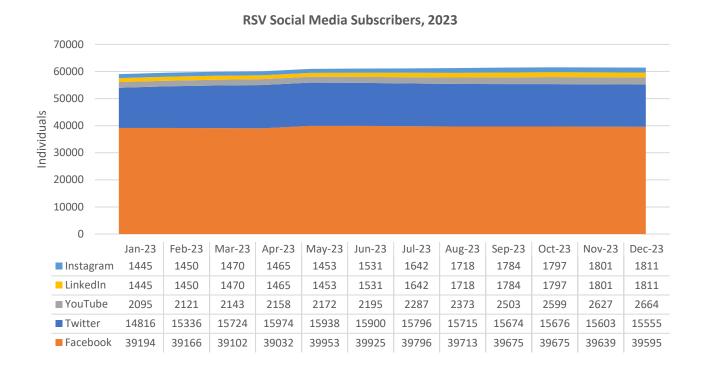
Social Media

2023 saw a pivot from the use of Twitter/X to LinkedIn as our main platform for content delivery. Despite a comparatively low subscription rate, our efforts bore fruit, achieving a significant reach from a low base and raising the visibility of Victorian scientists and science in the broader professional community. Social media posts reached a total of 3,137,823 people in 2023.



RSV Social Media Reach by Channel, 2023

As we no longer actively maintain our Twitter/X and Facebook accounts due to their much-diminished performance, we will see subscription numbers drop in the years ahead. Regardless, our cumulative subscription rate continues to grow through renewed efforts with LinkedIn, Instagram and YouTube; our total base grew by 3,622 followers in 2023 to reach a total of 62,159 subscribers across all channels.



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Progress against Program Goals in 2023

Goal 1: Regain and sustain National Science Week participation levels on par with 2018-19, with event numbers held above 400 from 2023 onwards.

Progress: Close, but not quite! We managed an increase on 2022 numbers, coming in at 390 registered events. A longer lead-in from 2024 with the certainty of program funding will hopefully help encourage more people to conduct National Science Week activities.

Goal 2: Sustain an excellent geographic spread of National Science Week events across Victorian regions, building a greater concentration of numbers in rural cities and remote areas.

Progress: An excellent outcome in terms of 'spread.' Further data collection and analysis is required of historical and contemporary regional concentrations to determine increases or decreases in overall regional activity.

Goal 3: Regain and Sustain 1,000 In-Person Audience Members for National Science Week Major Event

Progress: Achieved. 1,010 attendees were recorded by Science Gallery Melbourne in the commissioned Major Event Program, "Social Animals."

Goal 4: Seek a positive response rate of 75% and above from attendees at National Science Week's major event for the question "Did you Learn Something New During this Activity?"

Progress: None. Audience members were not surveyed by Science Gallery Melbourne.

Goal 5: Seek a positive response rate of 85% and above from attendees at National Science Week's major event for the question "Would you Recommend this Event to Friends or Family?"

Progress: None. Audience members were not surveyed by Science Gallery Melbourne.

Goal 6: Seek a negative response rate of 60% and above from attendees at National Science Week's major event for the question "Have you Been to a National Science Week Event Before?"

Progress: None. Audience members were not surveyed by Science Gallery Melbourne.

Goal 7: Seek a negative response rate of 60% and above from attendees at National Science Week's major event for the question "Do you Currently Work In or Study Science?"

Progress: None. Audience members were not surveyed by Science Gallery Melbourne.

Goal 8: Recover and sustain engagement with the 18 - 35-year-old age group to be at least 40% of those attending major events for National Science Week.

Progress: While audience members were not surveyed by Science Gallery Melbourne, this age bracket is their major stakeholder group across all activities, so we can quite safely assume this has been accomplished.

Goal 9: Establish and maintain partnership programs to activate and guide development of regional citizen science initiatives with partners such as the Royal Botanic Gardens Victoria, Landcare Victoria, Zoos Victoria and the Arthur Rylah Institute for Environmental Research. Seek participation numbers and standardised survey responses concerned with the utility and quality of the knowledge base presented and identify need for further information and/or support.

Progress: We've been unable to establish citizen science activities due to the contraction of partner organisations through and post-COVID reducing capacities for community outreach. However, engagement by

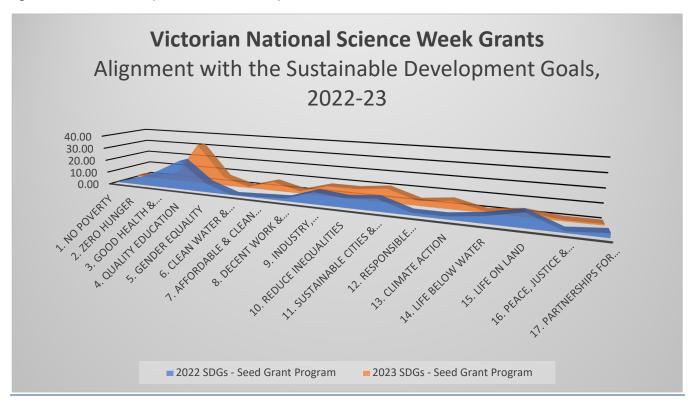
the RSV with the SWIFFT initiative has been fruitful and offers a conduit to providing targeted citizen science support to statewide fieldwork programs in the years ahead. https://www.swifft.net.au/

Goal 10: Ensure all programs consider the targeted inclusion of at least one equity group in seeking participation, under the following categories currently stipulated by the Commonwealth: *People Living in Rural, Regional and Remote Areas; Indigenous Australians; Women and Girls; People with Disabilities; Culturally and Linguistically Diverse (Migrant) Communities; LGBTQIA+; Low Socioeconomic Status; Other; and None.*

Progress: A good outcome for 2023. Out of 40 grants, only one did not identify a target equity group. The vigorous focus on People from Low-SES Backgrounds, Women and Girls, and Rural, Regional and Remote Communities, together representing 79% of grants awarded, are in accord with the aims of the program, while the further distribution of resources focused on the four key minority groups appears equitable.

Goal 11: Maintain data collection on program activities aligned with the UN's Sustainable Development Goals, seeking to sustain a direct concern with SDG 4, "Quality Education," in at least 25% of grant-supported programming.

Progress: Very good. 2023 saw mapping across all 17 Goals, with an increase in concern with "Quality Education" over 2022 (27.27%, up from 23%). There was a notable shift from "Life on Land" in 2022 to "Sustainable Cities & Communities" and "Climate Action" in 2023 for the National Science Week grants. Mapping against *Science Victoria* publication efforts is yet to be conducted.



Goal 12: Secure growth in subscriptions for all existing social media channels bar Facebook, and for Mailchimp mailing lists.

Progress: Mostly good. Twitter has effectively died, along with our ability to win impact with that audience, so we have abandoned efforts on this platform in favour of LinkedIn which, while offering a small subscription growth rate, provides very good audience reach. Subscription rates overall are growing, but Twitter will continue to decline as more of the RSV's followers abandon ship; we may need to review the measures of success on this goal. Ironically, our Facebook subscriptions have slightly increased. The Mailchimp mailing list is showing

encouraging growth following a move to Humanitix for ticketing program events and an easy option provided for registrants to "opt in" for digital copies of *Science Victoria* each month.

Goal 13: Redesign Inspiring Victoria website to improve navigability and discoverability of content by users, with the intention of securing and maintaining a lower "bounce rate."

Progress: Very good. A comprehensive redesign has been commissioned with EMD Digital and is nearing completion as of late November 2023. Data on bounce rates etc. will be collected from the old site before completing migration.

Financial Performance

For the period spanning 14 April 2023 to 29 February 2024

Income

Total Income	65,700.00	41,104.00	50,000.00	191,196.00	348,000.00
State Government Grant		16,104.00		183,896.00	200,000.00
Commonwealth Grant	65,700.00	25,000.00	50,000.00	7,300.00	148,000.00
	Targeted Science Engagement	National Science Week: Major Event	National Science Week: Statewide Program	Inspiring Victoria: Staffing	Total

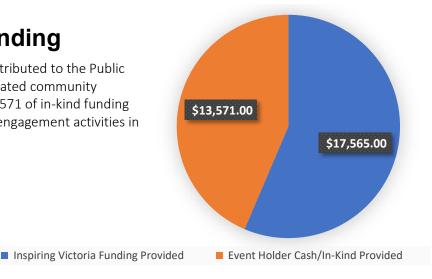
Expenditure

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The late arrival of funding in 2023 created difficulties for the Society in cost containment and financial control, resulting in a program deficit of \$39,029.64 borne by the Royal Society of Victoria. 2023 Inspiring Victoria program activities held in the months prior to April were funded entirely by the Society at a cost of \$21,487.

In-Kind Funding

National Science Week Seed Grants distributed to the Public Libraries Victoria network and incorporated community organisations resulted in a further \$13,571 of in-kind funding being allocated to community science engagement activities in Victoria in 2023.



Appendices

- **Appendix A** Report on Sustainability Web Portal Project, Public Libraries Victoria
- **Appendix B** Acquittals of Small Grants to Public Libraries and Community Organisations, 2023
- **Appendix C** Neighbourhood Houses Victoria Acquittal Report for National Science Week, 2023
- Appendix D Isentia Media Monitoring Report for National Science Week, 2023



Report on the Sustainability Web Portal Project Public Libraries Victoria Funded by Inspiring Victoria through the Royal Society Victoria

Summary

With the support of Inspiring Victoria, Public Libraries Victoria (PLV), through our Sustainability Special Interest Group (SIG), designed, developed and built an online portal to map sustainability activities in Victoria's public libraries and how they deliver on the United Nations Sustainable Development Goals (SDGs). Driving Environmental Sustainability for Library Communities had a soft launch in October 2023, and will be officially launched to coincide with launch of applications for National Science Week grants (May 2024).

This innovative platform is a testament to Victorian libraries' commitment to have a meaningful impact on sustainability, all while fostering a culture of awareness and action among their communities. The key goal of the portal is to support the library industry and communities to increase their knowledge to become more environmentally sustainable, and to spotlight library services that make a positive impact in this area. The site features an explanation of the SDGs with reference to public libraries (Attachment 1, figure 1), an interactive map that pinpoints key sustainable initiatives (Attachment 1, figure 4), and a bank of case studies to inspire new sustainable programs and partnerships (Attachment 1, figures 2 & 3).

1. Background

In an era marked by unprecedented global challenges, public libraries have positioned themselves as dynamic catalysts for change. They no longer simply curate and disseminate knowledge: they actively shape a sustainable future. Within this context, Victorian libraries have made significant strides to support communities with sustainability. The Sustainability SIG encourages library services to integrate the SDGs into their service offerings and is there to offer advice, resources and a commitment to ongoing SDG discussion. The development of the Driving Environmental Sustainability for Library Communities portal represents a new step in this journey.

2. Funding

Funding for this project was provided by Inspiring Victoria, a joint initiative of the Australian and Victorian governments with the Royal Society of Victoria. This support is acknowledged on the home page of the portal (see Attachment 1, figure 5). The bulk of the \$10,000 grant was used to contract Melbourne-based digital agency BSO Digital to design, develop and build the portal as an extension of the PLV website. BSO Digital was chosen as the preferred provider following an RFQ process through PLV.

3. Numbers and demographics of participants

The project working group comprised: Sustainability Co-convenors, Rachel D'Arcy (Brimbank Libraries) and Jessica Anderson (Goulburn Valley Libraries), Angela Savage and Zak Eichenbaum from PLV, Felicity Macchion (PLV Executive Committee member, CEO of

Goulbourn Valley Libraries and SIG mentor), and Janelle Hume and Tiarnan McShane from BSO Digital.

Thirty public libraries across Victoria (60% of the total) responded to a Sustainability Portal Initiative Survey, which the working group implemented to gather information about sustainable library initiatives in Victorian public library services.¹

The project was presented at the October 2023 PLV General Meeting attended by 44 library managers and CEOs, who were given an additional opportunity to complete the survey to ensure their libraries' sustainability initiatives were reflected on the site and interactive map. In the soft launch month of October 2023, there were 68 hits on the landing page, 70% of which subsequently converted to interactions with the map. Since the soft launch, the site has seen over 400 visitors. However, we expect these metrics to increase significantly once the site is officially launched in May 2024.

4. How activities/programs support and map to the SDGs

The Sustainability Portal is a comprehensive platform that brings the SDGs to life. It does this by breaking down the goals into digestible, engaging content that resonates with library users and the broader community by displaying how they relate to everyday life.

Sustainable initiatives introduced in Victorian libraries are plotted on an interactive map. The eight initiatives (community gardens, plant and produce swaps, community pantry, community lunches, energy saver kits, library of things, seed libraries, and the provision of e-waste bins) outline the impact of sustainable approaches. The initiatives provide tangible examples of how individuals, communities and libraries can contribute to a more environmentally conscious and socially responsible world.

- https://www.plv.org.au/sdgs/ This information is digestible, succinct and highlights practical ways Victorian public libraries are meeting the SDGs.
- All initiatives as featured in the interactive map are mapped to the relevant SDGs, drawing awareness of how the work in libraries directly correlates to the global goals. https://www.plv.org.au/interactive-map/
- Case studies featured on the portal are also mapped to the relevant SDGs. https://www.plv.org.au/case-study/

5. Contribution to delivering grass-roots science literacy and engagement programs to Victorian communities

The portal acts as a hub of sustainability education for library communities. By providing valuable information and resources, it empowers individuals and services to act on issues that matter most to them. Whether interested in environmental conservation, poverty reduction, climate action, or any other SDG, communities will find accessible, informative content on the platform.

The website's commitment to science education extends beyond mere information dissemination to serve as a platform for local libraries and communities to collaborate, share insights and implement projects that align with the SDGs. Victorian libraries are inspiring positive change on a personal, community and global level. They are helping people understand how individual actions contribute to the larger global agenda. By providing access to the site,

¹ There are 51 public library services in Victoria, consisting of 283 branches across the state.

which PLV believes is the first of its kind nationally, libraries promote the idea that every action counts, every voice matters, and collective efforts can bring about profound change.

The Sustainability Portal is not just a static information repository; it's a living, evolving testament to the commitment of Victorian libraries to make a positive difference. In the true spirit of the SDGs, it is a platform for learning, collaboration and transformation and an example of how libraries in Victoria can lead sustainability efforts in the community.

The portal will host information on National Science Week and is committed to continuing to work with Inspiring Victoria and RSV to provide information on applicable grants for libraries and communities.

The portal will add and feature case studies following National Science Week 2024 and any relevant environment/citizen science/SDG focussed program. These will be highlighted under the 'Resources' tab of the portal to inspire libraries and build awareness of science literacy and citizen science programming in libraries.

From 2025, the portal is anticipated to host a Victorian Public Library Sustainable Accreditation program framework and accompanying resources. The project is currently underway, led by Sustainability SIG convenors, using the Barrett Reid 2023-24 Scholarship awarded through State Library Victoria.

A full-length article on the sustainability portal featured in the December 2023 issue of INCITE, the magazine of the Australian Libraries and Information Association (ALIA), which is nationally distributed (Attachment 2). The article has been offered to the International Federation of Library Associations (IFLA) consideration for an upcoming magazine feature.

The portal has also been nomination for the IFLA Green Library Award (Special Project Category); winner to be announced in May 2024.

Attachment 1 Images

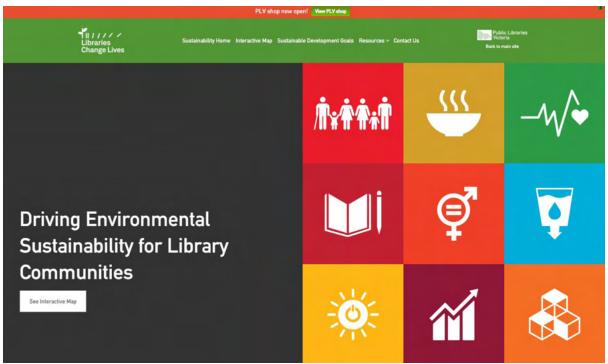


Figure 1: Sustainability portal home/landing page with links to SDGs

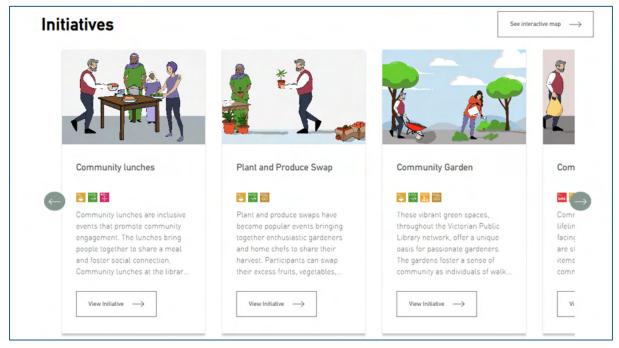


Figure 2: Menu of initiatives in libraries

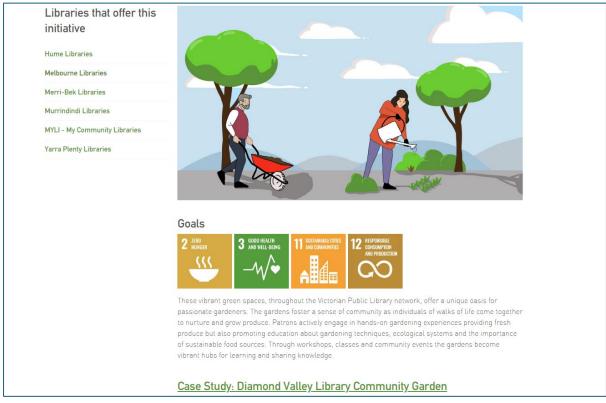


Figure 3: Detail showing Libraries that offer this initiative and link to case study

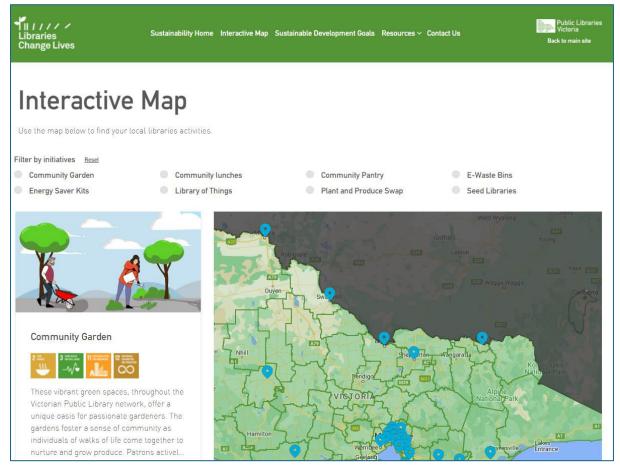


Figure 4: Interactive map for locating initiatives across Victoria



Figure 5: Acknowledgement of Inspiring Victoria support on landing page footer



Figure 6: Libraries Change Lives sustainability logo

FEATURE Attachment 2



Driving sustainability for library communities

During the 2021 Shared Leadership Program, some may say destiny led Jessica and Rachel, both librarians working at Public Libraries Victoria, to become not only walk-talk partners to digest the program learnings, but also partners in purpose to find ways of supporting sustainable development in libraries. They tell us more about this experience below.

Despite our diverse backgrounds, one from a regional setting and the other from a metropolitan one, we found ourselves sharing a deep commitment to the future of the public library industry.

This connection took a meaningful turn when we joined a project group focused on exploring how Victorian public libraries could promote environmental sustainability within their communities. As we delved into this research, it became evident that remarkable sustainability efforts were underway across Victorian libraries. However, a common challenge emerged - the need to facilitate the sharing of this valuable information between library services. In response to this need, our

project group (Jacqueline Auhl, Elizabeth Payne and Jac Torres-Gomez) took the initiative to establish a Sustainability Special Interest Group (SIG) under Public Libraries Victoria (PLV). The SIG, which we now coconvene, hosts eight meetings annually and has grown to include membership of more than 60 dedicated Victorian library and information professionals.

In an era marked by unprecedented global challenges, libraries have positioned themselves as dynamic catalysts for change. They no longer simply curate and disseminate knowledge; they actively shape a sustainable future. Within this context, Victorian libraries have made significant strides to support

communities with sustainability. The SIG encourages library services to integrate the United Nations Sustainable Development Goals (SDGs) into their service offerings and is there to offer advice, resources and a commitment to ongoing SDG discussion.

One exciting initiative in this journey is the development of the new PLV Sustainability Portal (www.plv.org.au/sustainabilityhome/). This portal is the result of many hours of collaboration between PLV staff, Sustainability SIG convenors and BSO Digital, a Melbourne-based web development agency using a grant from Royal Society of Victoria. This innovative platform is a testament to the commitment Victorian libraries make to have a meaningful impact on sustainability, all while fostering a culture of awareness and action among their communities. The key goal of the portal? To support the library industry and communities to increase their knowledge to become more environmentally sustainable, and to spotlight library services that make a positive impact in this area. The site features an explanation of the SDGs with reference to public libraries, an interactive map that pinpoints key sustainable initiatives, and a bank of case studies to inspire new

sustainable programs and partnerships.

The United Nations SDGs are a global call to action to end poverty, protect the planet and ensure prosperity for all by 2030. They provide a shared blueprint for peace and prosperity for people and the planet. Victoria, with its rich and diverse library network, has taken up the mantle to promote these goals, make them accessible to the public, and build widespread awareness for library and information professionals.

The Sustainability Portal is a comprehensive platform that brings the SDGs to life. It does this by breaking down the goals into digestible, engaging content that resonates with library users and the broader community by displaying how they relate to everyday life. We decided to highlight the sustainable initiatives introduced across Victoria with an interactive map. The map amplifies the innovative solutions libraries have put into practice in an answer to today's environmental and societal challenges. The eight initiatives (community gardens, plant and produce swaps, community pantry, community lunches, energy saver kits, library of things, seed libraries, and the provision of e-waste bins) outline the impact of sustainable approaches. The initiatives provide tangible examples of how individuals, communities and libraries can contribute to a more environmentally conscious and socially responsible world. We aim to track further sustainable initiatives as more practices are



The portal acts as a hub of sustainability education for library communities. By providing valuable information and resources. it empowers individuals and services to act on issues that matter most to them.

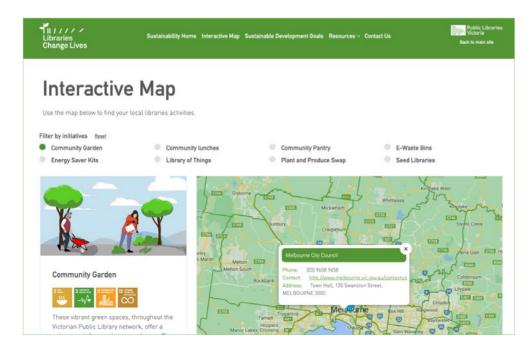
put into place. Services can contact convenors when they launch a new initiative so it can be added to the map.

The portal acts as a hub of sustainability education for library communities. By providing valuable information and resources. it empowers individuals and services to act on issues that matter most to them. Whether you're interested in environmental conservation, poverty reduction, climate action, or any other SDG, you'll find accessible, informative content on this platform. The website's commitment to science education extends beyond mere information dissemination. We feel it serves as a platform for local libraries and communities to collaborate, share insights and implement projects that align with the SDGs. Victorian libraries are inspiring positive change on a personal, community and global level. They are helping people understand how individual actions contribute to the larger global agenda.

By providing access to the site, which we believe is the first of its kind nationally, libraries promote the idea that every action counts, every voice matters, and collective efforts can bring about profound change.

The Sustainability Portal is not just a static information repository; it's a living, evolving testament to the commitment of Victorian libraries to make a positive difference. In the true spirit of the SDGs, it is a platform for learning, collaboration and transformation and a shining example of how libraries in Victoria are leading sustainability efforts in the community. To quote the International Federation of Libraries Association (IFLA) 2016, 'The consideration of the role of humanity in climate change and the notion of sustainable development are core concerns of society, and consequently of libraries.'

Victorian libraries are demonstrating that they are not just places to consume knowledge; they are places where knowledge is transformed into action, where citizens are educated and mobilised, and where positive change is born. This digital platform is a vibrant testament to the power of libraries to shape a brighter, more sustainable future for all. •



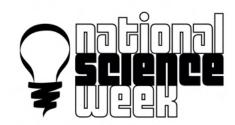
Jessica Anderson

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National Science Week 2023 in Victoria

Acquittals of Small Grants to Public Libraries and Community Organisations

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A Play Written By ChatGPT

8/17/2023, Melbourne, VIC

Pint of Science

Event Description:

What kind of play shall we write? Using input from the audience, witness captivating short plays written by ChatGPT! Between each segment, delve into enlightening explanations about AI, ChatGPT's inner workings, and the future of Machine Learning and AI. Join us for an hour of thought-provoking drama and insightful discourse, as we unravel the potential of AI-generated art and explore the ever-evolving landscape of technology.

Project Aims & Expected Outcomes

The aim is to bring awareness to the growing technologies and applications of AI and Large Language Models like ChatGPT. Audiences will find out more about how these technologies work, and where we can expect to see them in our work, schools, and home. They will be left with the question of how these technologies should be used and what laws may need to be made to help or hinder their development.

Categories of Science/Knowledge Explored: Innovation & Technology, Mathematics

Target Audience Demographic: All of the above

Underrepresented Groups Targeted: Women and girls, LGBTQIA+ community, People living with a disability, People from a low socio-economic background

Aligned Sustainable Development Goals:

- 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
- 8. Promote inclusive and sustainable economic growth, full and productive employment and decent work for all
- 10. Reduce inequalities within and among countries

Promotional Channels:

Promotion will be done through social media ads such as Facebook and Instagram. Also, reaching out to universities and schools in the area and distributing posters onto their campuses. Existing Pint of Science email lists and Pint of Science website plus social medias will also be used.

Funding Provided from Inspiring Victoria: \$750

Funding/Value Provided In-Kind: \$0 Estimated Audience Numbers: 60

Actual Audience Numbers: 56



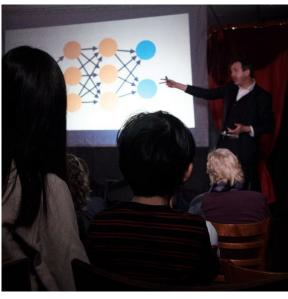
Acquittal Report:

"A Play Written by ChatGPT" was designed as a one-hour stage show for a general audience, including families and children aged 8 and above. The purpose of the play was to unveil the inner workings of ChatGPT, showcasing both its capabilities and limitations.

Additionally, it aimed to initiate broader philosophical and practical discussions about Al's current and future role in our world. The three-act play, entirely scripted by ChatGPT, was brought to life by actors from the Impro Melbourne theatre group. Between each act, short interstitials featured science communicator Sean M. Elliott, providing explanations on ChatGPT's inner workings, demonstrating potential uses, and exploring concerns related to the expanding use of Al.



Participants demonstrate how LLM Als construct sentences.



Event convenor Sean Elliott explains neural and how Language Learning Model Als learn and generate responses.

The performance took place over two nights during Science Week 2023 (13th and 20th August). Audiences actively participated by providing prompts used to generate each act, subsequently 'cold read' by Impro Melbourne performers.

The interstitials covered three key topics: the mechanics of ChatGPT, a historical examination of Neural Networks in relation to AI development, and the utilisation of ChatGPT to generate computer code, showcasing a Mandelbrot set (fractal) and a visualisation of the Milky Way Galaxy. Another segment addressed the potential misuses of AI, focusing on concerns related to the appropriation of work from writers and artists to train AI.

The overarching message aimed to convey that "The Genie is out of the Bottle," emphasising that Al Language Models (LLMs) are new tools that we need to understand; that we should not ignore or blindly embrace them, but to recognise and prepare for the implications of this technology.

To enhance the show, hands-on science activities were set up in the theatre foyer, catering to attendees of all ages. These interactive stations allowed families, individuals, and other audience members to engage in entertaining and educational science activities before and after the main performance. Impro Melbourne Theatre operated a bar during the event, providing attendees with the opportunity to enjoy refreshments.

The reception of the show exceeded expectations. The initial performance generated significant attention, leading to the second performance being entirely sold out. Notable media interest, including two radio interviews—one featured on ABC Radio Melbourne—further amplified the

success. Encouraged by the response and evident potential, plans are underway to take the show to larger platforms, with the Adelaide Fringe and Melbourne International Comedy Festival being strong contenders for future runs.

The collaborative efforts of Pint of Science Australia, Inspiring Australia (Victoria), National Science Week, and Impro Melbourne played a pivotal role in the event's success.



Sean seeking prompts from the audience.



Impro Melbourne performers reading the generated play from tablets.



Impro Melbourne actors in a dramatic moment from the third act.

Metrics

A. Audience Demographics:

The audience comprised a diverse mix of families and adults (18 to 60 years old), representing various educational and cultural backgrounds. This demographic aligns with the audience profile outlined in our grant application.

B. Audience Numbers:

- Initial Estimate (Grant Application): 60 attendees
- First Night Attendance: 26 attendees
- Final Night Attendance: Sold out, 30 attendees

C. Survey Responses - Summary:

- Gender Breakdown:
 - Women: 4 respondents Men: 2 respondents
- Age Distribution:
 - o 26-35 years old: 1 respondent
 - o 36-45 years old: 4 respondents
 - o 66 and over: 1 respondent
 - o Children (12 and under): Present (specific numbers not recorded)
 - o Youth (18-30 years): Majority of attendees
 - o Adults (31-64 years): Some attendees
 - o Seniors (65+ years): Few, if any (specific numbers not recorded)
- Diversity Group:
 - o LGBTQIA+: 1 respondent identified
 - o None of the above: 5 respondents (based on given data)
- Discovery Channels:
 - o Personal Invitation: 3 respondents
 - o Word of Mouth: 1 respondent
 - o Social Media: 1 respondent
 - o Radio Interview: 1 respondent
- Event Ratings:
 - o "A Play Written By ChatGPT" Quality: Average Rating of 4.8/5
 - o Foyer Science Activities Quality: Average Rating of 4.6/5
 - o Overall Event Quality: Average Rating of 4.8/5
- Selected Comments:
 - o "Catered well for mixed audience of adults and children."
 - o "Very informative and well-delivered."
 - o "Enlightened me about the use of ChatGPT in an entertaining manner."
 - o "Professional presentation. Logical. Flowed well. Fun. Good audience engagement. The kids could be involved."
- Future Event Attendance:
 - o Very Likely: 4 respondents
 - o Somewhat Likely: 2 respondents

D. Promotional Impact:

- Brochures and posters were distributed at Impro Melbourne theatre leading up to Science Week.
- Social media (primarily Facebook and Twitter) effectively reached the follower base of event organisers (Pint of Science, Sean M. Elliott, and Impro Melbourne performers).
- Notable media traction: A significant increase in interest was observed following an interview on ABC Radio Melbourne.

Reflection and Future Improvements

The event, "A Play Written By ChatGPT," successfully demonstrated the capabilities of current Large Language Models, and also provided an entertaining and educational event within a theatrical framework. It not only entertained but also stimulated intellectual discourse, generating discussions around technology and ethics after the performance.

A. Highlights:

- Performance Structure:
 - The three-act play, including audience input and interspersed with "interstitials," was an effective format. These interstitials provided valuable opportunities to explore the intricacies of AI workings, potential applications of ChatGPT, and pertinent ethical considerations.
- Script Generation:
 - o The actors' authentic, real-time cold read of the Al-generated script was a notable highlight. The delivery left some attendees speculating whether the script had been pre-prepared and rehearsed in advance.

B. Areas for Improvement and Future Considerations:

- Deeper Dive into Ethics:
 - o Future renditions could benefit from a heightened focus on the ethical dimensions and future impacts of AI in education, entertainment, and the workforce. This can encourage attendees to delve deeper into pressing ethical matters.
- Duration Extension:
 - o Extending the duration to an hour and a half would create a more relaxed pace, ensuring that nothing feels rushed.
- Return Performance Value:
 - o The unique nature of the show, where each performance is distinct, offers a high return value. This uniqueness could lead to repeat visits from intrigued audience members seeking varied experiences.
- Potential in Festivals:
 - o The format and content of "A Play Written By ChatGPT" positions it favourably for inclusion in other major festivals such as the Adelaide Fringe and Melbourne International Comedy Festival. Collaborative efforts and the right support mechanisms can transform this potential into a reality.

Conclusion

"A Play Written by ChatGPT" was a unique concept, combining stage improvisation skills with a Large Language Model Artificial Intelligence to produce a never-before-seen play from audience prompts

and perform it on the spot. The success of the show, evident in its sold-out performances and positive media reception, demonstrates that it was an engaging approach in unpacking the intricacies of ChatGPT.

The collaboration with Pint of Science Australia, Inspiring Australia (Victoria), National Science Week, and Impro Melbourne played a crucial role in the event's triumph. The metrics collected not only reflected the event's impact but also highlighted the diverse demographic reached, aligning with the envisioned audience profile.

Survey responses and ratings indicated a highly positive audience reception, with notable comments commending the show's ability to cater to both adults and children. There are also strong indications of potential repeat attendance and interest in larger festival platforms.

Looking ahead, a deeper exploration of ethical dimensions, an extension of the show's duration, and leveraging its unique return value for repeat visits are key considerations for future improvements. The potential for inclusion in major festivals opens new avenues for broader impact and recognition.

"A Play Written by ChatGPT" achieved its immediate goals and surpassed expectations; it also lays the groundwork for refinement and expansion. As the broader public navigates the evolving landscape of AI, this innovative event has the potential to become a recurring highlight, contributing both to the Australian theatrical scene and ongoing discussions about the ethical implications of AI technology.

.

Meet Finstein

8/18/2023, Echuca, Vic

Campaspe Shire Council - Campaspe Library

MONDAY, AUGUST 14, 2023 **8 RIVERINE HERALD** ture Einsteins set to mee

To celebrate National Science Week, Echuca Library is hosting a special storytime session on Friday, August 18, at 10.30am The session will be facilitated by

TwistED Science, who bring science to life with engaging, informative and interesting sessions that appeal to children of all ages and encourage

about gravity they will bring out a pom-pom popper, which is little tube with some rubber on it.

They will show the children that when you pull back on the rubber and let go, the pom-pom shoots into the city of the plant poly the city of the plant poly of the pom-pom shoots into the city of the plant poly of the poly of the poly of the plant poly of the poly of the plant poly of the pol the air and it falls back down.

Other experiments include baking soda and vinegar, water tension experiments and things with

The storytime session, run with the support of the Inspiring Victoria program, is aimed at pre-school-aged children.

not required.

National Science Week is Australia's annual opportunity to meet scientists, discuss the hot topics, do science and celebrate its cultural

and economic impact on society. First held in 1997, National Science Week has become one of Australia's largest festivals. Last year about 1.9 million people participated in more

have fun.

As the presenters read through the book *Meet Einstein* with the children, they will stop at various points a do a simple experiment.

For example, when the book talks about gravity they will bring out a manufacture of the present of the present of the present and activities. In 2023, National Science Week events will be held online and right throughout Australia—from Tasmania's dark sky astro-party to ancient Aussie beasts in the Northern Tasmania's form bird trains in ancient Aussie beasts in the Northern Territory, and from bird brains in Western Australia to a giant inflatable 'poo palace' in Newcastle — with everything including science festivals, music and comedy shows, expert panel discussions, interactive displays, open days and online activities.

The festival is supported by the Australian Government, partners CSIRO, the Australian Science Teachers Association and the ABC.
The 2023 National Science Week

The 2023 National Science Week runs from August 12 to 20.



Event Description:

Twisted Science Workshop for a special Science Week Storytime. The workshop is made for preschoolers and is a session that combines literacy and science together. The team from Twisted Science, which is an Echuca-based science communication and education company that delivers curriculum based hands-on workshops for children and adults, will conduct a 'Meet Einstein' session. The workshop will involve the children wearing lab coats, listening to a story called 'Meet Einstein' which covers some of his discoveries. As the story is being read, the team will stop at various points to do simple experiments, eg gravity, they will bring out the pom-pom popper. Other experiments include baking soda and vinegar, water tension experiments and things with magnetism.

Project Aims & Expected Outcomes

Children will listen to a story about Albert Einstein.

Children and their parents/carers will participate in simple experiments.

Library staff and Twisted Science Educators will work together to create a fun experience for all the attendees.

Categories of Science/Knowledge Explored: Chemistry & Materials, Innovation & Technology

Target Audience Demographic: Children (0 - 12 years), Families

Underrepresented Groups Targeted: Women and girls, Rural, regional and remote communities



Aligned Sustainable Development Goals:

4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all

Promotional Channels:

The event will be promoted through a media release, community radio library chat show, brochures, posters, Library and Council Facebook page and email to library customers.

Funding Provided from Inspiring Victoria: \$500

Funding/Value Provided In-Kind: \$0
Estimated Audience Numbers: 50-60

Actual Audience Numbers:

Acquittal Report:

We are pleased to advise that the activity for National Science Week was very successful with an overwhelming attendance and excellent feedback from the participants. The activity was conducted in the children's area of the library which created a great atmosphere and interest from other library visitors.



Two staff from Twisted Science conducted the activity with support from library staff. Kathy from Twisted Science commenced the session by reading the featured book *Meet Einstein* by Mariela Kleiner and Viviana Garofoli. This book explains principles of gravity and light in language suited to pre-schoolers. Children were then invited to wear lab coats and try on experimental glasses. The children and their teachers/parents and carers then had a number of workstations to move through

- hand-held poppers to pop pom poms
- baking soda, vinegar and colour experiment

- Specimens of insects and spiders in glass/resin blocks
- Live insects were also shown to the children



Most children had an opportunity to complete all experiments. Approximately 70 children and adults came along which exceeded our estimation of 30 attending. We were delighted to have Berrimba, a local indigenous child-care group, and a class from Twin Rivers Special School. Campaspe Shire Council Mayor, Councillor Rob Amos also attended the event and joined in the activities. All attendees integrated really well.

During National Science Week the local paper, *Riverine Herald*, ran an article about the event, please see attachment. The Riverine Herald also featured the article on their Facebook page. The event was promoted via the library website, Campaspe Library Facebook Page and X (Twitter) page and Community Radio EMFM. It was also promoted on the Campaspe Shire Council Facebook page. After the activity was conducted the Campaspe Library's post on its Facebook page reached over 2500 people. The post was also shared on the Twisted Science Facebook page.

Comments on the post

Twisted Science – "we had a blast"

Follower – "love their lab coats"

Follower – "I bet that was a whole heap of fun. What a fantastic Library we have"

Evaluation of this event involved children drawing something about their experience and we have included a selection of their drawings.

If we conduct another event with Twisted Science we would ensure that we took bookings rather than open invitation to ensure that we could provide numbers to Twisted Science prior to the day.

Thank you for the grant funding which enabled us to offer this excellent activity to our community and we hope to have the opportunity to run a similar event next year.



Butterfly Adventures

8/17/2023, Parkdale, Vic

Kingston Council

Event Description:

This event will be delivered by the staff of Butterfly Incursions. The primary program combines a live butterfly interactive tent with four rotating activity stations; science table, drawing table, book table and word activity table. The sessions are designed by drawing on educational principles which aim to highlight key assessable areas within the Australian Curriculum for primary students.

Project Aims & Expected Outcomes

The aim of this project is to provide opportunities for the target communities to experience the wonder and learning that interacting with nature brings. The average cost for a family of four to enter Melbourne Zoo is minimum \$84 thus by providing an activity within the geographic area of the target community (Chelsea and Westall) we are able to remove the costs associated with travel and entry to the Zoo.

By providing the opportunity directly to schools we aim to even further remove barriers to access, by acknowledging that language and socio-economic situation may result in lack of knowledge around opportunities and experiences available we are able to widen the reach of whom this experience may benefit.

We expect that this program will provide immeasurable experiential outcomes to the 100 children who will attend. Appreciation of quality education and the skills that are promoted during the session clearly link to increased education outcomes that have lasting impacts through life-long learning.

Exposure to experiences to those who cannot access it otherwise, increases their understanding of the world around them (life cycles, nature etc) in a way that can be appreciated in 'their own backyard' and provides the additional contextual understanding of the complexities of the natural world around them along with a different and new way of seeing the world around them.

Categories of Science/Knowledge Explored: Environment & Nature

Target Audience Demographic: Children (0 - 12 years)

Underrepresented Groups Targeted: Migrant communities, People from a low socio-economic background

Aligned Sustainable Development Goals:

- 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
- 10. Reduce inequalities within and among countries

Promotional Channels:

Via reaching out to local low-socioeconomic schools and arranging class events as well as a public session promoted via our monthly e-newsletter, posters, social media and staff outreach and well as through Our Place (an educational support charity operating in Westall Community Hub)

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$250
Estimated Audience Numbers: 100

Actual Audience Numbers: 111

Acquittal Report:

For this activity we aimed to reach as many in our community, particularly; those who may or may not have the ability to travel to Melbourne Zoo (along with covering the associated cost), those with an interest in insects and butterflies and to connect with as many of our communities across the council area.

Over the course of two days, we ended up offering 4 sessions. Two publicly bookable sessions (at Cheltenham and Clarinda Libraries), one session directly to a local home school group who would not otherwise have the means to organise an external presentation such as this and lastly to Clayton South Primary School Prep class, who walked to Clarinda library for an excursion to celebrate Science Week and their local library.

The impact of the sessions was immediately visible on the day, the enthusiasm and prior knowledge of some participants was astonishing and equally contrasted with the noticeable tactile learning that occurred through the presentation and the interactive tables that also accompanied the Butterfly Tent. The success of the program lay in the opportunity to bring science week to a wide range of communities, and the chance to experience hand on learning was an invaluable opportunity for all the groups, even aspects as small as modelling of different experiences,



some as simple as sitting and listening to a presentation is an important experience for all children. We are very grateful that we were able to offer the opportunity to such a wide scope of Kingston City councils' community, beyond those who are just regular library users.

Metrics

	Cheltenham Session	Clarinda Library Session	Homeschool Group	Clarinda South Primary School
Audience demographics	Ages 5 - 13	Ages 5-11	Ages 3 -8	Ages 5-6
Equity category	Low- socioeconomic	Low- socioeconomic & migrant communities	Low- socioeconomic &	Low- socioeconomic & migrant communities
Audience numbers - estimated	25	25	25	25
Audience numbers - actual	25	42	26	18

Promotional impact

We reached out to our community through a variety of methods, to attract a variety to communities. For the school and home school group, we were able to directly offer the session by reaching out to them. For the public sessions, as we set out, we communicated the event via the Kingston Libraries monthly e-newsletter, posters in our branches, official social media account and through staff outreach. This resulted in two of the sessions being booked out, fortunately both library spaces offered the capacity for overflow, and we were able to accommodate the demand as it occurred.

Feedback

"I learnt so much, even as an adult!"

"When is the next session? This is so awesome"

"My son loves all insects but is terrified of butterflies, I'm so proud that he got into the tent and interacted with them"

"Very informative, thank you"

"So awesome we had the opportunity to come in and get a special session".

Big Science Big Fun Show

8/12/2023, Frankston, Vic

Frankston City Libraries

Event Description:

An introduction to the world of science, interactive experiments and demonstrations covering Newton's third law, Physics, Chemistry & Cryogenics, demonstrated through gigantic bubbles, flying toilet paper, hair-raising electricity experiments, bubbling liquid nitrogen demonstrations, levitating beach balls, volunteers on a nail chair, a giant gyroscope, fireballs, and much more!

Project Aims & Expected Outcomes

To introduce a wide section of our demographic to high-level science experiments and demonstrations that they wouldn't normally be able to access. to inspire an interest and love for the world of STEAM in our younger library goers.

Categories of Science/Knowledge Explored: Chemistry & Materials

Target Audience Demographic: Children (0 - 12 years), Families

Underrepresented Groups Targeted: People living with a disability, People from a low socio-economic background

Aligned Sustainable Development Goals:

- 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
- 5. Achieve gender equality and empower all women and girls
- 9. Build resilient infrastructure, promote inclusive, sustainable industrialisation and foster innovation



Promotional Channels:

This event will be promoted through our regular website and social media channels, as well as sharing with our local community groups and schools that have a high proportion of families from a lower socio-economic background.

Funding Provided from Inspiring Victoria: \$990

Funding/Value Provided In-Kind: \$0

Estimated Audience Numbers: 240

Actual Audience Numbers: 197

Acquittal Report:

The event was booked out, however, we ended up having 197 attend, 43 shy of the registered capacity. There was a wonderful mix of families, including grandparents bringing their grandchildren along, know families that frequently use the library's free facilities and many new faces in the library space.

One of the grandparents was quoted as saying "How great to see how much libraries have changed! What a wonderful space for our children" which was very heartening to hear. The children all actively listened and participated in the show, making lots of noise and cheering at the incredible science experiments.

Fizzics Education put on a brilliant presentation as usual.



Professor Bunsen at NG Libraries

8/25/2023, Stawell, Vic

Northern Grampians Libraries



Event Description:

Explosive Flights & Forces

As part of National Science Week, Professor Bunsen, a skilled educator and scientist, will visit the Stawell & St Arnaud Libraries to thrill and excite with the science of forces & motion. Bring your students over, so they can experience the amazing power of push & pull. Objects will stick, pull, push, duck and dive! Floating objects will balance & beat gravity as well as a student that will float around the library - no magic! Other exciting demonstrations include gas bazookas, swirling buckets, smoke cannons and Barbie or Ken being launched from a water rocket (weather permitting). Target groups will be Grades 1 to 6 school students.

Project Aims & Expected Outcomes

Below is the description of the sessions that we have booked in for our two libraries.

Forces, Motion & Energy (The Science of Toys)

This session focuses on the physical laws that govern the movement of bodies. We use toys to discover the push & pull forces that make them move. Find out that energy is required to create the unbalanced force.

Types of forces: push & pull. Does no movement mean "no force"?

The fundamentals of motion, unbalanced force & energy. Can we levitate a product by balancing the acting forces? Can we balance and even beat gravity with other forces?

Direct acting forces and forces acting over a distance. Examples of forces between molecules, smaller objects and massive objects such as Earth and Sun

Senior students: See all three of Newton's laws in action. We find that energy can be stored in batteries, food, muscles, springs, fuel, elastics, capacitors and we see examples of all.

We discover how energy is converted from potential energy to kinetic energy in toys, steam engines, and see chemical energy "explode". We float objects and eventually, a student on air!

Bonus: We can include our famous outdoor water rocket session with Barbie & Ken and Cola & Mentos (weather dependent)

Categories of Science/Knowledge Explored: Chemistry & Materials, Energy & Transport

Target Audience Demographic: Adolescents (13 - 17 years)

Underrepresented Groups Targeted: Rural, regional and remote communities, People from a low socio-economic background

Aligned Sustainable Development Goals:

4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all

Promotional Channels:

In-house flyers/posters. Online promotions using our website, Facebook, and eNewsletter "Check It Out - NG Libraries". Northern Grampians Shire Council (NGSC) media platforms, e.g. our event roundups in the local newspapers, digicoms, and newsletter "Employee Matters". Through our email mailing list, school newsletters, and other relevant contacts.

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$0

Estimated Audience Numbers: 100-200

Actual Audience Numbers: 242

Acquittal Report:





We had educator/scientist, Professor Carl Ahlers, aka Professor Bunsen hold two shows on Forces, Motion & Energy (the science of toys), one at Stawell Library and the second at the St. Arnaud Town Hall.

The main aim was to engage foundation, Grades 1 to 6 audiences, including other interested people of varying ages, and get them excited about science!

Outcomes

The sessions were jam packed with fun little experiments that wowed the crowd and proved

that yes, you can certainly be entertained and educated at the same time!

The children's full attention was engaged and the interaction between Prof. Bunsen and the kids was great, with a robust questions and answers being had throughout the shows.

Metrics

- 195 foundation-grade 6 students from Stawell, St. Arnaud, and surrounding townships Great Western, Landsborough and Marnoo
- 10 home-schooled children
- 37 adults, mostly teachers accompanying students, but also parents and guardians etc.
- The event provided great exposure to children from regional, remote, and home-school educational background who ordinarily have limited opportunity to attend a show of this unique,

experimental, hands-on, interactive, science-based nature.



Our promotions in-house, via emails and contacts, print, and online were effective is generating a lot of interest, buzz about National Science Week, and ultimately drawing good numbers at both venues.

Feedback

We received about 30 feedback forms, roughly divided between children and adults, and they were all positive. Comments included: brilliant, fabulous, fun, engaging, educational, entertaining, interactive, loved it, great, wonderful, great presentation, exciting, incredible,

One wrote: "I was satisfied with today's event" "Yes!!! Longer time & More experiments would be awesome. We'd love more events like this. Absolutely loved it.", "100% Satisfied!!!! This was pitched perfectly for school kids, he was excellent. Thank you so much."



My thoughts

The event was fantastic, and Professor Carl Ahlers captivated the attention and imagination of the audience and may have even helped some discover a love for science! Even though we didn't get any criticism about our venue at Stawell Library, I would probably schedule our event during non-open hours so that the children express their excitement unreservedly.





Sparking Science

8/18/2023, Coburg 3058, Vic

Merri-bek Libraries

Event Description:

A fun-filled interactive event aimed at pre- and school aged children and their parents to discover the many facets of science. To help our diverse Merri-bek community discover how science fits within our daily lives and encourage discussion and deeper understanding what science means and how it can contribute to all areas of our lives.

Project Aims & Expected Outcomes

Creating a new Science collection for pre-school and early years which will be available across all 5 Merri-bek libraries. Our Sparking Science event is to help initiate interest in Science for young children and promotion of the new science kit collection. We also hope to use these kits in future science programs delivered through School Holidays, in our Makerspace areas and through regular after school programs. If proving popular, we would look to expand and add to this collection of kits.

Categories of Science/Knowledge Explored:

Chemistry & Materials, Environment & Nature, Innovation & Technology, Mathematics

Target Audience Demographic: Children (0 - 12 years)

Underrepresented Groups Targeted: Migrant communities

Aligned Sustainable Development Goals:

- 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
- 5. Achieve gender equality and empower all women and girls
- 11. Making human settlements inclusive, safe, resilient and sustainable
- 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss

Promotional Channels:

We will utilise both the library's and council's social media presence to reach wide across the library service. There will be flyers up within the library's and targeted pre-school and primary schools.

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$3900

Estimated Audience Numbers: 30

Actual Audience Numbers: 28



Acquittal Report:

Our aim for this year was to ignite the interest and excitement of our young (and older) Merri-bek community to the possibilities of science in our everyday life through a fun and interactive experience. To assist in our endeavour, we purchased Spark! Junior discovery boxes to use with several pieces of general household resources to show easy ways to create science.

Some of the household items we used were: soft drink bottles, miniature soy sauce fish, string and coat hangers. Combined with the contents of the Spark! Junior discovery boxes meant a guaranteed positive event with lots of questions, exploration and OOOH's.

The highlight of the evening was the demonstration using a plasma ball and a fluoro tube. With lights turned low, the participants watched in rapture as the tube came to life. (This one was not a shared hands on experience but rather a watch and see experience)

We had 17 young people (ranging in age 6-14) and 11 adults (including 1 school science teacher) join us for the event. There were people from several of our migrant communities represented. We had estimated for 30 people to attend and were extremely pleased to note there were 28 in total.



We promoted this event through the library and Council social platforms, Eventbrite page and through electronic flyers (shown on our library tv's) within the libraries.

We did not undertake any qualitative surveys at the event but were asked by several of the participants (young and old) whether the Spark! Junior discovery boxes were available for loan, or if not where they could be purchased as they really loved what they contained. The Science teacher was so impressed by some of the demonstrations she was going to use them in her science classes. We were also asked "when we were going to do another one of these nights as I loved it! It was cool!"

Upon reflection of this event, we have concluded that scheduling more of these events across several of our libraries would allow us to develop, smooth out delivery and expand the program. We could

run more targeted, age-appropriate sessions i.e. pre-school or primary aged levels rather than a session that tries to keep all ages engaged.

We do believe everyone involved from the attendees to the Merri-bek staff all thoroughly enjoyed their time at this event, and we even managed to turn some of the "non-believers" of some of the experiments into converts.

Retro Game Design Workshop

8/16/2023, Scoresby, Vic

Eastern Regional Libraries

Event Description:

"Retro Game Design Workshop" will be run at two of our libraries, Lilydale Library and Ferntree Gully Library. In these afterschool events, participants will learn and employ game design principles as they use block coding to create a retro arcade game.

The events will be run for participants aged 9-14. As participants will have differing levels of coding experience, we will introduce block coding concepts through simultaneously building a simple game while providing opportunities for those more advanced to experiment.

Participants will be tasked with creating a simple game that involves their character moving around the screen to pick up randomly generated objects. They will receive points for how many objects they pick up in a specified timeframe. They will create and customise both the character and objects, programming how they move, and where and how often the objects will appear.

They will design their arcade game on our library laptop suite, using the program MakeCode Arcade. Once completed, participants will export and test their game on an Elecfreaks Retro MakeCode Arcade Game Console. They will look at what can be changed and will edit their code on the laptop before exporting it again. Participants will also be encouraged to swap consoles and test each other's creations.

Throughout the program we will offer feedback on their games, providing suggestions on how they can be improved, and challenges for those more advanced.

On completion of the event the parent/guardian will be emailed a link to play the arcade game created at home.

These sessions will provide an opportunity to discuss core games design concepts, and where we can see these in popular arcade games. We will ask participants to think about what kind of arcade games they would like to create, and what they would need to include to achieve it.

Project Aims & Expected Outcomes

This project aims to:

- Provide an opportunity to introduce new (or develop existing) block coding skills for participants aged 9-14 with varying backgrounds and skill levels.
- Provide an opportunity to develop mathematics, structural logic, and problem-solving skills.
- Engage participants through game-based learning.
- Develop an understanding of core game design concepts.
- Create opportunities for out-of-school learning activities.
- Foster STEM mindsets in our communities and highlight the approachability of STEM activities.

Categories of Science/Knowledge Explored: Innovation & Technology, Mathematics

Target Audience Demographic:

Underrepresented Groups Targeted: Women and girls, Rural, regional and remote communities, People from a low socio-economic background

Aligned Sustainable Development Goals:

4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all

- 5. Achieve gender equality and empower all women and girls
- 9. Build resilient infrastructure, promote inclusive, sustainable industrialisation and foster innovation

Promotional Channels:

The events will be promoted...

- In Your Library's monthly newsletter (80,000+ subscribers)
- On Your Library's social media channels (9,500 followers)
- On in-branch digital signage
- Through a Your Library National Science Week flyer made available at our 14 branches
- Via radio appearances on Radio EasternFM.

Funding Provided from Inspiring Victoria: \$850

Funding/Value Provided In-Kind: \$0

Estimated Audience Numbers: 20, not including parents/guardians

Actual Audience Numbers: ?

Acquittal Report:

None given.

Deadly Science - Science Through a First Nations Lens

8/17/2023, Torquay, Vic

Torquay Community House Incorporated

Event Description:

Join respected First Nations Educator and proud Gunditjmara woman Nikki McKenzie for an evening of knowledge and storytelling.

- Learn about innovations and practices developed by First Nations peoples over thousands of years.
- Discover sophisticated systems and ways of caring for country.
- Learn scientific principles embedded in cultural practices passed down through culture and story.

By centering First Nations perspectives, this Science Week event seeks to challenge existing paradigms and celebrate our first and future scientists.

"First Nations people have used science for over 65,000 years. Our culture is the oldest in the world. The first scientists passed on the lessons of the land, sea and sky, to the future scientists of today through stories, song and dance. We call this caring for Country. If you care for Country, the Country will care for you." - deadlyscience.org.au

We are seeking this grant to partially cover the fee for the Event facilitator which will total \$1400.

Other costs will be covered by funding from the Surf Coast Shire Council, funding from Torquay Community House and Volunteer labour.

Project Aims & Expected Outcomes

Project Aims:

- A vital cultural voice: This event puts First Nations voices front and centre by providing a platform for sharing of knowledge systems, perspectives and practice.
- A First Nations lens: First Nations peoples have developed sophisticated scientific understandings and methodologies over millennia, which may differ from mainstream Western science. By sharing this knowledge, the event promotes the appreciation and recognition of First Nations culture and diverse scientific perspectives.
- Science Education and Engagement: This event aims to broaden the understanding of science by showcasing the holistic and interconnected nature of First Nations science. It offers participants an opportunity to learn about and engage with different ways of knowing and conducting science.
- Reconciliation and Respect: In centering First Nations perspectives and knowledge, we aim to promote respect for First Nations peoples, their culture and ongoing contributions to science. The event aims to challenge historical biases and stereotypes and foster a deeper understanding of the first scientists the Traditional Owners of this country.
- Community Building: The event aims to strengthen relationships between the local First Nations community and the broader community. By creating a respectful and inclusive space for learning and sharing, the aim of this event is also to foster mutual respect and understanding.

Expected Outcomes:

- Increased awareness and appreciation of First Nations scientific knowledge and practices.
- Enhanced understanding of the interconnectedness of culture, science, and the environment.
- Empowerment and validation of First Nations voices and perspectives in the community.

- Strengthened relationships between the First Nations community and non-Indigenous community members.
- Inspiration and engagement of students and educators in exploring diverse scientific perspectives.
- Contribution to broader efforts of reconciliation and decolonisation in the field of science education.

Categories of Science/Knowledge Explored: Indigenous Knowledge

Target Audience Demographic: Adolescents (13 - 17 years), Families, Young adults (18 - 24 years), Adults (65+ years)

Underrepresented Groups Targeted: Rural, regional and remote communities, First Nations Peoples **Aligned Sustainable Development Goals:**

4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all

Promotional Channels:

This event will be marketed via our social media platforms and a combination of print and electronic media will be distributed throughout local community networks including businesses, educational settings and local community groups. We will also invite the local paper to cover the event.

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$300 Estimated Audience Numbers: 30-40

Actual Audience Numbers: 15

Acquittal Report:

We wanted this National Science Week Event to be a powerful and engaging evening of learning and it certainly was. Facilitator Kurnai Wotjobaluk man Norm Stanley very generously shared his ancestral scientific knowledge through interactive storytelling. Participants were able to study handcrafted boomerangs and weapons up close, touch possum skin used for cloaks and experience the sacred sounds of the Didgeridoo.

In learning about cultural practices and the knowledge base that informs them, the group gained a greater understanding of what it means to deeply listen; to be connected to and care for country. All participants expressed that they would like to attend further events like this and appreciated "the inviting and informal setting where questions were welcome." This is an event we will run again due to community interest.

* Please note: Facilitator Nikki Stanley was unable to attend due to family commitments.

Norm asked for no photos to be taken during the session, so we ensured that we took photos of two very happy participants after the session.



Audience demographics:

Age demographics: 6-15years - 2 attendees, 25-34years - 2 attendees, 35-44years - 6 attendees, 55-64years - 2 attendees, 65+years - 3 attendees

Audience numbers:

A total of 15 people attended the event on the night. A further 10 people registered but did not attend the event. All attendees were local to regional Victoria, based around the Surf Coast and Geelong. Audience numbers were lower than estimated, although initial ticket registrations were in line with the lower end of our estimates. Poor winter weather for an evening event may have contributed to non-attendance on the night!

Promotional impact: (via social media, newsletters etc)

This event was promoted primarily via social media, and through email invitation via local secondary schools and interested community groups. The promotional posts reached 3.9k accounts across Facebook and Instagram, with around 70 likes & reactions to the posts. Additional promotion was done through physical posters at the local library and community notice boards.

Testimonial report on general verbal feedback:

Attendees appreciated the relaxed and informal atmosphere the Community House setting provided. All participants felt that Norm was very generous with his time, knowledge and sharing of resources. Science Teachers and Scientists in attendance shared that they had come to learn a different perspective and felt the session had done just that.

Younger members of the audience were thrilled to be gifted their very own boomerang to practice throwing after learning techniques for different shapes. Many stated that they did not want the evening to end, with all participants expressing interest in attending more events of this nature.

It was apparent that by providing a welcoming, tactile, and interactive learning environment, Norm had in fact invited us all into a very meaningful sacred space of mutual respect and understanding.

A reflection on what we think would improve the event next time:

There were several people who registered for this event but did not attend. In future, we would send a reminder email to all who register prior to the event. We would also consider alternate presentation times, including weekends, to increase the reach of the presentation.

Everyone's an Inventor

8/15/2023, Portland, Vic

Glenelg Library

Event Description:

An afternoon program that allows every kid to become an inventor!!

Makey Makey is a versatile and interactive invention kit that can be used to teach various STEM concepts, including electrical circuits, conductivity, coding/programming, and creative problemsolving. Makey Makey allows students to invent and design their own interactive projects using everyday objects as inputs, such as fruits, vegetables, or other conductive materials. This helps students think like an inventor and see the world as a construction kit. It can inspire kids in our community to think creatively, develop their own unique ideas, and express themselves through inventive projects.

We will hold two after school events in the libraries during science week, one in Casterton on Tuesday 15 August and the second in Portland on Friday 18 August.

The first station will demonstrate how a banana is conductive! The world is full of conductive objects & materials, kids can make musical circuits with liquids, fruits, and low cost office supplies.

At the second station kids can design their own game controller with everyday materials like playdough or graphite pencils.

A third station will let kids experiment with what materials are conductive and what's not.

The Makey Makey kit STEM Pack - classroom invention literacy kit has 12 sets which will allow us to set multiple invention station allowing kids to rotate through, creating and inventing their own experiments.

Project Aims & Expected Outcomes

Makey Makey is a fantastic tool for teaching STEM concepts in a fun and engaging way providing our kids with opportunities to engage in active learning, inquiry exploration, and experimentation, which can enhance their understanding of STEM concepts and foster a love for STEM learning. Opportunities outside of the classroom can be limited in regional areas, some kids are lucky and get to visit museums and places like science works but others aren't, so being able to offer this activity here in Portland & Casterton allows us to bring these experiences directly to our community giving all our kids equal opportunities and quality education in our libraries.

by the end of the session kids will have a better understanding of STEM concepts, including electrical circuits, conductivity, coding/programming, and creative problem-solving.

Having the Makey Makey kits will allow us to run STEM learning programs beyond science week further enhancing opportunities for the kids in the Glenelg Shire.

Categories of Science/Knowledge Explored: Innovation & Technology

Target Audience Demographic: Children (0 - 12 years), Adolescents (13 - 17 years), Families

Underrepresented Groups Targeted: Rural, regional and remote communities

Aligned Sustainable Development Goals: 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all

Promotional Channels:

Events will be created for Facebook/instagram and our library website for both locations, events will also be added to the Mixx FM radio website.

Posters created and distributed to schools, libraries, and local businesses.

Funding Provided from Inspiring Victoria: \$700

Funding/Value Provided In-Kind: \$400

Estimated Audience Numbers: 40

Actual Audience Numbers: ?

Acquittal Report:

Not provided.

Exploring Careers in STEM

8/17/2023, Melton, Vic

Melton City Libraries

Event Description:

Melton City Libraries is excited to partner with Western BACE and their STEM Squad for Science Week in 2023. The STEM Squad is comprised of young community members from diverse genders and backgrounds who are passionate about delivering STEM education. Melton City Libraries and Western BACE have an on-going partnership delivering STEM related activities and programs. The programs are targeted to primary and secondary aged children in the City of Melton through regular afterschool sessions and a robust school holiday offering.

In line with the theme of Science Week 2023: Innovation: Powering Future Industries we will deliver an in-conversation style panel discussion with three members from the STEM Squad to converse about their career pathways and possibilities in the STEM industry, now and in the future, to help inspire other young people and community members. The panel will be moderated by Western BACE's Community Manager with plenty of time for question and answer from the audience. The program will be held at Melton Library and Learning Hub in our lecture style seminar room in the evening of Thursday 17/8/23. The panel discussion will contribute to an array of science week programs delivered by Melton City Libraries to people of all ages.

Project Aims & Expected Outcomes

The aim of the project is to promote STEM education and employment, open up conversations about the possibilities of pathways and future destinations from other young people, their peers, making it more appealing than hearing from well-established people in the industry. This will help the conversation remain relevant to the way education and employment pathways are currently, and help inspire everyone who attends that the potential future leaders of STEM industries could be amongst them.

Another aim of this project is to see further engagement and inform future programs with Melton City Libraries and Western BACE to help develop interest and skills in these topics amongst local young people. It is particularly important that we have these conversations in areas like the City of Melton, where higher education rates are comparatively low, and some STEM careers may be considered out of reach, unless we provide programs like this one.

Categories of Science/Knowledge Explored: Innovation & Technology

Target Audience Demographic: Adolescents (13 - 17 years), Families, Young adults (18 - 24 years), Adults (25 - 64 years)

Underrepresented Groups Targeted: Women and girls, Rural, regional and remote communities, First Nations Peoples, Migrant communities, People from a low socio-economic background

Aligned Sustainable Development Goals: 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all, 8. Promote inclusive and sustainable economic growth, full and productive employment and decent work for all, 9. Build resilient infrastructure, promote inclusive, sustainable industrialisation and foster innovation

Promotional Channels:

Promotion will be undertaken via:

- Melton City Library's eNewsletter (which reaches over 27,000 subscribers)
- Melton City Council website
- Library and Council social media

- posters and flyers in our library branches

- drop-in STEM workshops at schools in the week leading up to the panel

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$0
Estimated Audience Numbers: 50

Actual Audience Numbers: 4

Acquittal Report:

Melton City Libraries and Western BACE delivered Exploring STEM Careers, a discussion panel of diverse young people who work in various STEM fields, on 17 August 2023. This program was supported by Inspiring Australia as part of National Science Week.

The event was intended for adolescents, young adults, and their families. In line with the theme of Science Week 2023: Innovation: Powering Future Industries, the panel covered career pathways and possibilities in the STEM industry, now and in the future, to help inspire other young people and community members. The panel was moderated by Western BACE's Community Manager with plenty of time for question and answer from the audience.

Although attendance was low, those young people and their families who did attend seemed very engaged with the panel and asked thoughtful questions. The panellists were excellent, sharing a mixture of STEM-related and general career advice.

Audience demographics: Given the attendees were local to Melton, they live in an outer metropolitan and low socioeconomic area. There was an equal split of genders, and a diverse representation of other backgrounds.

Audience numbers: Attendance included the panel and moderator (4), and other attendees (4), of which 2 were Year 9 students, one was a carer, and another was an older student. Our estimate in our application was 50 attendees.



Promotional impact:

Melton City Libraries

- Library eNews 1 August 2023: distributed to 29,000 people, 116 clicks on link to science week events.
- Event posted on Melton City Libraries socials (Facebook: 4,800 followers, Instagram: 225 followers) on 30 July and 12 August these posts were reposted by a number of other organisations.
- Booking page for the event was viewed 450 times, and 10 bookings were made.

Western BACE

- Western BACE Facebook: Post reached: 215, Engagement: 13
- Western BACE LinkedIn: Post engagement: 7, Post reach: 192
- Instagram account: Post engagement: 6, Post reach: 48
- Newsletter campaign: opened 314

Other marketing channels and community pages that shared event:

- Atherstone Community page
- Melton Harkness community page
- Djerriwarrh Community College (grades 10, 11 & 12)
- South Sudanese Community Facebook page
- Poster Western BACE Community board

Quality:

Some key takeaways from the discussion panel:

- Always take any opportunities to meet people, learn new things
- Networking is a valuable skill
- Set up and use LinkedIn ASAP, update it frequently
- GitHub account for software projects
- Communication skills are key no matter what jobs you will have
- Interviews need to demonstrate creativity in thinking
- Consider the future when you make decisions but don't necessarily lock yourself in

Feedback:

Panellists and audience members expressed that the event was valuable, and that the conversation was of a high quality. The audience members demonstrated a keen interest in STEM through their questions and were able to have quite a personalised experience due to the small turnout.

Melton City Libraries and Western BACE were disappointed with the low attendance, which could possibly be attributed to cold, wet weather that night. A piece of our proposed promotion strategy was dropped due to staff resourcing, which was in-school drop-in sessions with Western BACE to promote the panel. This may have made a difference, but it is hard to say. If this event were to be attempted again, we would like to include this strategy.

Coding with Robo Trains!

8/14/2023, Scoresby, Vic

Eastern Regional Libraries

Event Description:

Coding with Robo Trains will be run at three libraries across our region (one in each of our member Councils): Croydon Library, Boronia Library, and Yarra Junction Library.

At each event, participants will learn the basics of coding by programming an electronic train to move efficiently around a train track.

Two events will be run for 7-11 year olds (at Boronia Library and Yarra Junction Library). As participants will have different levels of coding experience, we will start with the very basics while still providing options for those more advanced to experiment.

We will introduce learner coding concepts with the tactile coloured squares "Action Snaps". Participants will place these tiles on the tracks, combining the different colours to create different code snippets. These pre-set codes will change the trains' steering, speed, stopping, lights and sounds. Once participants understand how these codes work, they will use "Snap Editor" on the compatible app to create their own codes.

The third event will be run for kids aged 11-14 (at Croydon Library). This event will focus on advanced coding, through the block coding program Scratch. Participants will use block coding concepts to control their train to move efficiently around the track. Those who are ready for the challenge will be asked to join their tracks together and collaborate to avoid collisions as their trains move around the tracks.

These sessions provide an opportunity to discuss public transport, its social and ecological function, and how it is a sustainable alternative to cars and motor vehicles. We will ask participants what other modes of transport are sustainable, and how we can incorporate them in our lives, e.g., walking/riding to school when the weather is nice.

Project Aims & Expected Outcomes

This project aims to:

- Provide an opportunity to introduce and develop coding skills for participants aged 7-14 with varying backgrounds.
- Provide an opportunity to develop existing coding skills through a variety of challenges.
- Promote STEM through an engaging hobby.
- Create opportunities for out-of-school learning activities.
- Foster STEM mindsets in our communities and highlight the approachability of STEM activities.
- Raise the profile of public transport and its benefits.

Categories of Science/Knowledge Explored: Energy & Transport, Innovation & Technology

Target Audience Demographic: Children (0 - 12 years)

Underrepresented Groups Targeted: Women and girls, Rural, regional and remote communities, People from a low socio-economic background

Aligned Sustainable Development Goals:

- 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
- 5. Achieve gender equality and empower all women and girls

- 7. Ensure access to affordable, reliable, sustainable and modern energy for all
- 9. Build resilient infrastructure, promote inclusive, sustainable industrialisation and foster innovation
- 11. Making human settlements inclusive, safe, resilient and sustainable

Promotional Channels:

The events will be promoted...

- In the Your Library monthly newsletter (100,000+ subscribers).
- On Your Library's social media channels (9,500 followers).
- On in-branch digital signage.
- Through a Your Library National Science Week flyer made available at our 14 branches.
- Via radio appearances on Radio EasternFM.

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$0

Estimated Audience Numbers: 15, not including parents/guardians

Actual Audience Numbers: 13

Acquittal Report:

These events followed the plan closely. Attendees were introduced to the Smart Trains, with a focus on how they used light sensors to detect the colour of the Snap Tiles and decode their instructions. Attendees followed pre-designed tutorials to learn all basic train functions, then invited to build their own railway maps and complete games and challenges. Some attendees also used the Intelino Play app on our iPads to remotely control the trains and create their own codes using the purple Snap Tiles.

The technology kits have since been used at subsequent events in September, October and November and attendance has grown. The technology will contribute to after-school and school holiday programming at all 14 of our service locations for years. The Smart Trains offer highly accessible and easy-to-learn technology that is great for 'learning through play'. They are also suitable for public libraries, thanks to their size and broad applicability. The events had a frustratingly low attendance, but ongoing programming will ensure a good return on the grant investment.

Feedback:

Re: Coding with Robo Trains:

"More explanation about coding e.g. linking the activity with how coding works would help."

From YJ staff: "We had 4 kids in the end, with one travelling from Bayswater for the event. The parent who came from Bayswater so thrilled with the event and said it was well worth the 1 hour drive. The trains ran well and there were no technical issues. Both Steph and I were able to instruct and help the kids as needed. The children did well at picking up the function of the different coloured snaps, learning quickly what each colour does and remembering to put a white one first. They had a great time experimenting with the snaps and trying different commands. We had the opportunity to use the iPads to program different commands. They loved seeing the different coloured lights, sounds and how fast they could make the train go. Thank you so much for choosing YJ to host an event using the trains. They were a big hit and I look forward to using them for future events."

Notes: Event attendance was low. No other direct attendee feedback was received. The technology kits have since been used at subsequent events in September, October and November and attendance has grown. The technology will contribute to after-school and school holiday programming at all 14 of our service locations for years.

Power Up Pakenham - Learn about Electricity at Pakenham Library

8/14/2023, Warragul, Vic

Myli - My Community Library (Pakenham)

Event Description:

Power Up Pakenham - Learn about Electricity at Pakenham Library will provide children a chance to embark on multiple projects in groups of 4 (accompanied by parents/carers as well), working with the Snap Circuits 750 Educational Version Exploration Kit. This team-based event will be lead by a Children's and Youth Librarian. Children and their families will be able to engage with the kits, with support from our facilitator to learn about electricity and electronics in a hands-on, fun workshop. The kits include many options for projects, including the following. We will also run the same program in our STEAM Club which runs every Monday afternoon.

Topics Covered:

- Basic Components & Circuits
- Motors & Electricity
- Resistance
- Capacitors
- Transistors
- Oscillators and Electronic Sound
- Integrated circuits

- Electromagnetism and Radio
- Meters, Transformers, & FM Radio
- Diodes & Applications
- Electronic Switches
- Electromagnetism
- Sun Power
- New Ways to Look at Circuits

Project Aims & Expected Outcomes

This project aims to get children excited about science and technology with a fun hands-on activity for Science Week, learning about the basics of circuits and electricity. This has the potential to develop into ongoing learning as these kits have many projects that can then be run through later school holiday programs or STEAM Club activities that children might decide to attend as well. This will develop the skills of staff and expand the capacity of the library service to run programs focused on electricity and electronics and can lead into programs on different types of energy sources and sustainable power. This program takes place in a lower socio-economic community on the far outer fringe of Melbourne (we serve many surrounding country areas) that does not have a lot of access to science programs outside of schools as they are either paid, or are quite a distance travel away (other than our STEAM Club here at the library).

Categories of Science/Knowledge Explored: Energy & Transport, Innovation & Technology

Target Audience Demographic: Children (0 - 12 years), Adolescents (13 - 17 years), Families

Underrepresented Groups Targeted:

Rural, regional and remote communities

People from a low socio-economic background

Aligned Sustainable Development Goals:

- 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
- 7. Ensure access to affordable, reliable, sustainable and modern energy for all
- 9. Build resilient infrastructure, promote inclusive, sustainable industrialisation and foster innovation
- 10. Reduce inequalities within and among countries

12. Ensure sustainable consumption and production patterns

Promotional Channels:

We will advertise through the branch via posters and promotion at the circulation desk and at other programs, but also on our website and Eventbrite. We can also email schools and ask them to promote the program to their students.

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$441

Estimated Audience Numbers: 80+ (40 children plus at least one parent each)

Actual Audience Numbers: 42 (20 children, 4 teens, 18 adults)

Acquittal Report:

The aim to get children excited about science was achieved, with all participants engaged and having fun. The kits will be used in our STEAM and Holiday events in the library in the future and will be used as a continuous learning tool. It was great to see kids following instructions and using their problemsolving skills when things didn't work. Skills were developed with staff, parents and students and will lead to more complicated programs in the future. This program has enabled access to STEAM programming in a remote area that students may not have had an opportunity to participate in outside of the library.

Promotion:

Events were promoted on the Science Week Website, Eventbrite, MYLI Facebook and Instagram accounts. Posters were created to display in relevant branches/locations. Local schools, councils and newspapers were contacted.

Feedback

- 94% of participants said they learnt something new from participating in the program
- 100% of the participants had fun
- The children were really engaged with the questions and eager to learn
- Some of the students suggested they would like one of these kits for home









There were quite a few no-shows for the second Power Up Pakenham event. This is unfortunate as the event was fully booked and there would have been some kids that missed out on the event. The kids that did come to the event probably got more out of the experience from a learning perspective as they didn't have to share the kits and had more engagement with staff. We can try and address this in the future by evaluating the time or contacting participants prior to the event. Some students suggested that they would have liked to have some more free time once they had learnt how to use the kits. We could accommodate this by running a slightly longer program in the future.:

Get the Ball Rolling!

8/12/2023, Woodend, Vic

Goldfields Libraries (Woodend branch)

Event Description:

Get the ball rolling' will invite library visitors to engage with a set of interactive boards that allow participants to create and modify â€~marble runs'- a series of ramps, tunnels, jumps and funnels that control the path of a marble. The activity- designed by the Exploratorium Science Centre and made available online for others to emulate- is simple, open-ended and appeals to people of all ages. We will install a series of Marble Run boards in the centre of the library space for the duration of Science Week to provoke discussion, collaboration and wonder. Signage and nearby STEM-related book displays will help to make the connection to National Science Week.

Project Aims & Expected Outcomes

Visitors to the Woodend Library are already invited to participate in incidental activities like jigsaw puzzles or board games when they enter the library space. During Science Week we would like to tap into people's natural curiosity by offering them the opportunity to pursue their own ideas and inspirations within a shared community space. The boards themselves are visually interesting and will inevitably provoke discussion amongst library visitors about the ideas generated by others and possibilities for extending or improving the marble runs. As well as drawing attention to National Science Week we are aiming to give people an experience where they feel they can contribute and have some ownership over the outcome, in line with the principles of Inquiry-Based Learning. This will hopefully provide for a much more memorable experience than a static display or activity with a fixed outcome. In additional the Marble Run resources will be available for future STEM programming at other branches of Goldfields Libraries.

Categories of Science/Knowledge Explored: Innovation & Technology

Target Audience Demographic: All of the above

Underrepresented Groups Targeted: Rural, regional and remote communities

Aligned Sustainable Development Goals:

- 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
- 9. Build resilient infrastructure, promote inclusive, sustainable industrialisation and foster innovation

Promotional Channels:

As we regularly host activities and events, we will tap into our existing networks for promotion that have proven successful. We will promote the activity through our social media pages, website, local media, seasonal program, as well as through physical posters in the library and around town.

Funding Provided from Inspiring Victoria: \$800

Funding/Value Provided In-Kind: \$2350

Estimated Audience Numbers: 250

Actual Audience Numbers: 151

Acquittal Report:

'Get The Ball Rolling' was designed as a drop-in activity that would allow participants to engage with an open-ended activity - creating a path for a ball to travel along - in a relaxed manner during Science Week. Four large interactive boards were built and installed in the library space for the duration of Science Week, with a variety of materials available to create paths with. Signage highlighting the

boards and a nearby display of science-themed books helped to reinforce the purpose of the activity. 'Get The Ball Rolling' proved very popular, particularly with primary school students visiting after school finished.

Many of these participants were regular visitors to the library who usually come in and play Minecraft on their school laptops after school, so it was refreshing to see them engaging in a different activity. Many of these kids came back repeatedly and were often eager to continue tinkering with a design that they had worked on previously. Of the participants that took part, approximately 80% were primary school-aged, with most of the remainder being parents with younger children in tow. These family groups tended to engage more with the 'example board' that had been set up, with smaller children enjoying watching the ball travel through the path again and again, whereas the primary school-aged kids were more intent on creating their own designs.

Overall, 151 people engaged with the activity across the course of National Science Week. Although this was less than the estimate of 250 in our original application, we were very happy with the depth of the engagement from those that participated, with the majority of participants spending considerable time with the activity, and some participants spending several hours overall creating their own ball runs. While the activity was promoted through a variety of different channels, we found that most of the visitors to the library became aware of the activity simply as a result of having come in and discovered it. We received many positive comments about the activity over the course of the week:

"Thanks for the marble run activity - really good for hand eye coordination"

"This is such a great idea...my son spent a long time trying the activity and he really enjoyed it"

"That was cool!"

We also had one small boy who started crying when he was told that the activity would not be there the week after Science Week...an unfortunate reflection of how much he had enjoyed the activity!

The Marble Run boards will certainly get used in the future across the Goldfields Library branches. When we run the activity again we will look at ways of engaging a wider cross-section of the visitors who come to the library. Although it wasn't unexpected that younger kids would be the most eager to respond to the boards there would certainly be ways in which we can seek to increase the number of adults participating in the activity.

Launch into Science Week

8/13/2023, Ballarat, Vic

City of Ballarat Libraries

Event Description:

Ballarat Libraries, in partnership with Ballarat Observatory, invites the community to explore the wonders of astronomy and our natural world at Ballarat Observatory - an important scientific and historical facility - right in the heart of Ballarat.

The session will include:

- Observatory tour lead by Observatory Manager, Judith Bailey
- the tour will include learning about different types of telescopes, including the disability access telescope, Federation-Adcock Telescope
- opportunity to launch water rockets and learn the science behind them
- opportunity to see and learn about the camera obscura

Ballarat Observatory is one of the oldest observatories in regional Australia, with one of the best collections of 18th to 21st Century telescopes. The buildings first opened in 1886, known as the Oddie Observatory. The Observatory has a commitment to public education and aims to make complex concepts understandable and enjoyable for all.

Ballarat Observatory welcomes and assists people who have challenges with learning, communication, understanding and behaviour. The facility caters for people who use a wheelchair and/or mobility aids.

Project Aims & Expected Outcomes

Provide a quality lifelong learning opportunity, focusing on local opportunities to learn about our worldand to be motivated to care about the environment

Build library networks and provide an opportunity to promote all of the libraries other learning opportunities

Build and strengthen our community relationships by collaborating with Ballarat Observatory and providing opportunities to collaborate further in the future.

Increase our reach into the community through active collaboration with successful and engaged organisations, with established networks.

We want to achieve:

- Full attendance at the tour
- Participation by non library users, to introduce the library services in a way that is fun and relaxedâ€⁻
- Encourage new participants to Ballarat Observatory and support their objectives, as our collaborators.
- Support the Ballarat Libraries commitment to the City of Ballarat Disability Access and Inclusion Plan, by providing opportunities for all people to participate in lifelong learning activities and connect with community

This partnership will bring each of our organisations new audiences and opportunities for further community learning science programs.

Categories of Science/Knowledge Explored: Environment & Nature, Innovation & Technology, Space & Astronomy

Target Audience Demographic: All of the Above

Underrepresented Groups Targeted: Rural, regional and remote communities, People living with a disability

Aligned Sustainable Development Goals:

- 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
- 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- 17. Strengthen the means of implementation and revitalise the global partnership for the goals

Promotional Channels:

City of Ballarat Libraries has established communication channels to publicise and promote the event. These include:

- - print and social media channels.
- -e-newsletters with subscriber lists of 300+.
- -established relationships with local media outlets.
- established relationships with community and education stakeholders.

Ballarat Observatory will assist by publicising through their networks.

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$500

Estimated Audience Numbers: 40

Actual Audience Numbers: 70

Acquittal Report:

With funding from a National Science Week Community Seed Grant, Ballarat Libraries partnered with Ballarat Municipal Observatory to deliver two very successful Launch into Science Weeks events 13th and 20th August 2023. Participants were divided into groups and rotated through three activities - launching water rockets, exploring a camera obscura and pinhole cameras, and observing the shadow of the sun and its sunspots with a telescope. To finish the event all participants were able to see the Baker telescope – the first large telescope built in Australia.

The aim of the events was to provide a family friendly, intergenerational learning opportunity. In addition, Ballarat Libraries aimed to build and strengthen networks and community relationships through collaboration with Ballarat Observatory.

How it went

The events had an 87.5% attendance rate. A combined total of 80 tickets were booked, with 70 attending the events.

Participants were predominantly library users with only 2 respondents being non-members. The majority of the participants had not been to the Ballarat Municipal Observatory before.

Many people had driven past the Observatory before and felt curious about it, they were pleased to have the opportunity to go beyond the gate and experience this historically important facility. For others it was their first awareness that there is an Observatory in Ballarat.

The events were a fantastic opportunity for Ballarat Libraries STEAM staff to learn from Ballarat Observatory science communicators.

Audience demographics

Participants ranged in age from 10 months to 75 years of age. Most people visited in a family group. Some visited as a couple, and one participant attended alone.

Audience numbers

Adults: 30. Children: 40. Average age: 19. Range: 10 months – 75 years

A total of 70 people attending 2 events. Both events booked out in a matter of hours!

Promotional impact

Promotion through Ballarat Libraries Humanitix presence had high impact. The events booked out very quickly, with most participants learning about the program through a prompt email from Humanitix, or the Ballarat Libraries Facebook page.

Quality

Participants were asked to fill in a survey after the event. The feedback was overwhelmingly positive:



Why did you decide to attend this event?

- always looking for fun, interactive science activities for the kids
- free, educational, interesting
- interested in visiting the observatory and teaching kids about space



What did you learn today?

- about telescopes/sunspots/light refraction
- glass is fluid
- fun facts about telescopes
- great resource in Ballarat

What was the best thing about the event?

- learning more about space
- the sun spots in the brick building telescope
- the kids loved making the rockets
- rockets!
- all of it! loved the reflector

How to you feel after the event?

- Stoked! Loved the event! Thank you so much!
- fun, amazing





What did we learn for Science Week events in 2024?

Running two sessions meant that we were able to learn a lot from the first one, and put those learnings into place the second time around. Given the speed that both events booked up, there is an obvious demand for intergenerational learning activities in Ballarat. Ballarat Libraries can potentially provide even more opportunity through running similar events throughout the year.

Building the partnership with Ballarat Observatory has been very beneficial. To improve next time, a MOU would be helpful to have clear boundaries and understandings about each organisation's roles. Sickness on behalf of Observatory staff meant for some sessions Ballarat Libraries staff stepped up to present. This was a great opportunity for library staff, but potentially a problem if staff did not have the content knowledge. A plan for staff absence in advance would be useful for any future collaboration.

Engaging local media to attend and photograph and interview participants could have been beneficial for promotion of both Ballarat Libraries and Ballarat Observatory, and Inspiring Victoria and National Science Week.



Create a Working Computer with Anything, Even Playdough!

8/15/2023, Port Fairy, Vic

Corangamite Moyne Library Service

Event Description:

2 consecutive sessions with teacher Tracey Gray using Makey Makey kits.

With a guided session using Makey Makey kits children can create any kind of 'keyboard" using anything at hand like playdough or even bananas. Technology meets creativity. They would learn about circuits and how computers work while having fun.

Project Aims & Expected Outcomes

We will be inviting the local schools to attend Tracey's sessions. We are aiming for 2 consecutive sessions on Tuesday 15th of August.

Tracey Gray is a passionate environmental scientist. Her book, published last year by CSIRO, Oceans of Plastic won an honorable mention from the CBCA.

She brings a wealth of knowledge and enthusiasm in everything she does.

Every workshop that Tracey runs has an environmentally positive philosophy.

Categories of Science/Knowledge Explored: Innovation & Technology

Target Audience Demographic: Children (0 - 12 years), Adolescents (13 - 17 years)

Underrepresented Groups Targeted: Women and girls, Rural, regional and remote communities, First Nations Peoples, LGBTQIA+ community, People from a low socio-economic background

Aligned Sustainable Development Goals:

- 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
- 5. Achieve gender equality and empower all women and girls
- 10. Reduce inequalities within and among countries
- 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Promotional Channels:

Sessions for August 15th would be directly organised with school teachers.

Future science sessions on school holidays would be promoted to the general public on our Facebook pages and local newspapers.

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$0 Estimated Audience Numbers: 40

Actual Audience Numbers: 24

Acquittal Report:

Koroit primary school's grade 2 class was invited to participate in this activity at the Koroit Public Library. The kids thoroughly enjoyed the workshop and had fun while learning about conductivity and beginners coding.

We used the 10 Makey Makey kits purchased with your grant together with our Library iPads to work in groups of 2 and 3. The children learnt about open and closed circuits and beginners coding with

Scratch. They experimented with conductive materials like metal, lead pencil (drawings!), leaves, playdough, and their bodies as conductors of electric currents! (organic and moist materials containing salts).

Adding sound to each material provided the extra fun; they were not only fascinated with the conductivity itself but with the fun that you can have with it all. They got very creative: making chains of humans holding hands to be conductive, attaching the alligator clips to everything they had at hand (some will conduct, some won't).

They all agreed that they wanted to come back to the Library for more.

The \$1000 grant was spent as follows:

10 Makey Makey Kits - TOTAL (AUD): \$793.42

2 hours training for Library Officers-provided by teacher Tracey Gray @ \$70 per hour = TOTAL \$140 Contribution towards Library staff extra time payments = \$66.58

The Facilitator

One of the changes from our application was that Tracey Gray couldn't take the workshop herself due to personal circumstances. However, Tracey was able to train me and Chantelle (casual Library Officer) to run the session. This proved very empowering for us and will give us the opportunity to train other Library Officers for future Makey Makey activities.

Feedback

From the Koroit school's Science teacher: Malenie Vesey.

"Thank you so much Claudia! Students are actually in the process of writing you a thank you letter, so stay tuned for that! Yes, these students have no photo restrictions and are fine to print in any media. The students and teachers had so much fun, thank you for the great opportunity! I am disappointed that I couldn't attend. The other teacher's name is Tiarna:) "

Everything Old is New Again - a New Way to Manage our Urban Environments!

8/12/2023, Melbourne, Vic

Geography Victoria

Event Description:



The way that water is managed in urban landscapes has been transformed in recent years. Traditional approaches to managing stormwater and urban parks has kept us safe from floods, but has also degraded natural systems and disconnected communities from the environment. This is all changing as water managers and communities strive to restore and reconnect these systems. Rippon Lea, Yalukit William and Elster Canal, located in the Bayside and Glen Eira local government areas, are a fabulous example of this transformation.

As part of Science Week, we propose to take a group of approx. 40 people on a walking tour with local restoration and environmental specialists, that will explore the challenges, successes and opportunities in this new way of managing our urban environment.

The community-driven rewilding and transformation of the former Elsternwick golf course in North Brighton into the Yalukit Willam

Nature Reserve features expansive restored wetlands, waterways and reintroduction of locally extinct plant species. It has been planned and restored to maximise the benefit to local indigenous birds and other species.

The bluestone canal that runs through Elwood, built to drain the swamp, provides an interesting opportunity to study what wildlife persists in urban areas.

Rippon Lea is the last of Australia's great privately owned 19th Century suburban estates. The gardens were originally designed to be self-sufficient when it comes to water. Underground is an extensive drainage system which dates to the 1880's. Whilst this was turned off in the 1960s, the system has now been restored so that 95% of the garden is lake-watered today.

Program for the day:

10.00 - Noon Meet at Yalukit William to explore nature reserve and Elster Canal

Noon - 1.00 Lunch at Rippon Lea (café option)

1.00 - 2.30 Tour Rippon Lea gardens/sustainable water

practices

2.30pm Optional tour of Rippon Lea home



Project Aims & Expected Outcomes



During COVID people became more aware of their local area - they walked and rode within their 5 km limit for months and months. This project aims to assist people to now explore their backyard with environmental experts and to learn more about their local environment.

Not only will it reveal the transformations that are happening in their city, we hope that it will galvanise them into getting involved in a more sustainable future. It will focus on the importance of water and sustainable practices in creating healthy and liveable communities.

The target audience for this field-trip are residents across suburban Melbourne, and also the broader community of participants in Geography Victoria fieldtrips. They are an eclectic group of individuals interested in exploring their environment and learning about innovative solutions to 20th century challenges. We have participants from a diverse range of backgrounds and ages - from 4 to 80 years of age.

Learning about sustainable practices and rehabilitating the environment is part of life-long learning. The fieldtrip aims to inspire participants to implement and become engaged in more sustainable practices in their home and local environment.

Categories of Science/Knowledge Explored:

Environment & Nature, Indigenous Knowledge, Innovation & Technology

Target Audience Demographic: All of the above

Underrepresented Groups Targeted: None

Aligned Sustainable Development Goals:

3. Ensure healthy lives and promote well-being for all at all ages

- 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
- 6. Ensure availability and sustainable management of water and sanitation for all
- 11. Making human settlements inclusive, safe, resilient and sustainable
- 13. Take urgent action to combat climate change and its impacts
- 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss

Promotional Channels:

- Geography Victoria direct email communications to database, social media
- Royal Society of Victoria website, journal, social media
- Geography Teachers' Association of Victoria social media, membership communications
- Association of Bayside Municipalities
- National Trust

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$2300 Estimated Audience Numbers: 40-45

Actual Audience Numbers: 40

Acquittal Report:

National Science Week and the grant from the Inspiring Victoria program provided Geography Victoria with the opportunity to share a local urban renewal and sustainability success story. Geography Victoria engaged local restoration and environmental specialist Gio Fitzpatrick and the property manager of the National Trust owned Rippon Lea Estate Matt Chester, to present two very different neighbouring projects highlighting the challenges, successes and opportunities of managing our urban environment.

Our focus was on sustainable practices, urban renewal, water management. This fieldtrip encompassed visits to the following:

- Yalukit Willam Nature Reserve, a community-driven rewilding and transformation of the former Elsternwick golf course in North Brighton into a community nature reserve featuring expansive restored wetlands, waterways and reintroduction of locally extinct plant and animal species.
- The bluestone Elwood Canal, built to drain the swamp, and what wildlife persists in this urban area.
- Rippon Lea Estate, the last of Australia's great privately owned 19th century suburban estates and the restoration of the original underground drainage system a wonderful lesson in sustainable water practice.

Promotion

The fieldtrip was advertised via the Geography Victoria database, Geography Victoria Facebook and also via the Royal Society of Victoria member notification for the August edition of the magazine *Science Victoria*. It proved to be very popular - the fieldtrip was sold out in 24 hours. A report will be published in the Geography Victoria newsletter (September) which is provided to a database of more than 250 individuals. The Royal Society of Victoria will also publish a report of the fieldtrip in its October journal Science Victoria. This report has been written by a participant in the fieldtrip.

Audience

Forty people attended the fieldtrip, which was in line with expectations. The fieldtrip sold out within 24 hours. Attendees were from a broad range of back grounds. They came from the local area, suburban Melbourne and also regional Victoria (Macedon and Warragul). Whilst most attendees could be categorised as mature age, a couple of younger university students and a couple of children attended. Most attendees came by car (free all-day parking was available in the vicinity). One rode a bike and two arrived by public transport (tram and train).

Detailed fieldtrip notes were provided to all participants. These notes were compiled by Geog Vic members in consultation with the speakers. These notes were emailed to all participants prior to the event.





Improving the Event

The overall response has been extremely positive. Participants were totally engaged, and the two areas provided excellent contrasting examples of sustainability practices being implemented to adapt to a changing climate. Both presenters captivated their audience with their extensive knowledge and the participants asked many pertinent questions.

Timing worked well with a lunch break providing an opportunity for participants to mix and to refresh before the second session.

Geography Victoria would like to ensure we cater for a broad range of demographics. Gio Fitzpatrick is a gifted speaker who also works with young children in a bush kinder setting. It would be great to have an additional event in the same area with a focus on young children (5-8 years old) which would include a hands-on component. This may attract a younger demographic and thus would enable us to cover a broader age range.

Feedback

Feedback from participants emphasised the quality of the presentations, the enjoyment of the experience of visiting the nature reserve and the Rippon Lea gardens, the lunch on the expansive verandah of the mansion and the overall organisation of the event. A request for feedback from participants elicited the following responses:

- I found Saturday's excursion extremely interesting, particularly the Chain of Ponds in Elsternwick. Gio was excellent, especially the way he explained the interdependence of all the life in the ponds and surrounds, from invertebrates to trees and not forgetting the swamp rats. (Nick)
- The day proved to be both highly instructive and thoroughly enjoyable for all those involved in the excursion a worthy contribution by Geography Victoria to National Science Week. (Garry)
- Gio should be knighted. (Rob)

- No improvements necessary, you all did extremely well organising the day. Thank you. (Beryl)
- Thanks again for all your hard work Rose and I really enjoyed the event. (Glenn)
- Thank you so much for the day. Both venues and presenters were fabulous. Gio's enthusiasm and knowledge was outstanding. (Jo)
- Great to have an outdoors fieldtrip event that appealed to all ages as part of National Science Week. Really liked that it was geography-based. (Steve)

MYLI Presents STEM Zone

8/16/2023, Warragul, Vic

MYLI - My Community Library (Cardinia)

Event Description:

MYLI - My Community Library will be collaborating with Stem Zone to explore this year's Science Week topic of Innovation: Powering Future Industries. Stem Zone will be hosting a workshop to explore a number of different angles:

- production of usable energy via sustainable alternatives
- investigation of different types of fuels and how they can be used to create a greener, more sustainable yet productive future
- exploring different technology through AI, virtual reality and robotics in order to investigate how these may be used to create future industries and solve current issues

Participants will be exploring solutions with a 'creative station' where they design and build a prototype for a problem or need in the community. They will also be able to explore different types of technology and learn how they can be used to create a better future.

Project Aims & Expected Outcomes

The main aim of the project is to help participants explore the Science Week Topic of Innovation: Powering Future Industries by:

- exploring problems and solutions
- exploring new technology

The outcome of the project will be that participants will learn how to:

- formulate and articulate ideas
- engage their imagination and explore possibilities
- weigh connections and relationships
- identify the use of appropriate technology to research and solve problems
- identify and solve a problem
- to engage students in science, technology and possible employment opportunities for the future

Categories of Science/Knowledge Explored: Energy & Transport, Environment & Nature, Innovation & Technology

Target Audience Demographic:

- Children (0 12 years)
- Adolescents (13 17 years)
- Young adults (18 24 years)

Underrepresented Groups Targeted:

- Women and girls
- Rural, regional and remote communities
- First Nations Peoples
- Migrant communities
- LGBTQIA+ community
- People living with a disability
- People from a low socio-economic background

Aligned Sustainable Development Goals: 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture, 3. Ensure healthy lives and promote well-being for all at all ages, 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all, 5. Achieve gender equality and empower all women and girls, 6. Ensure availability and sustainable management of water and sanitation for all, 7. Ensure access to affordable, reliable, sustainable and modern energy for all, 8. Promote inclusive and sustainable economic growth, full and productive employment and decent work for all, 11. Making human settlements inclusive, safe, resilient and sustainable, 12. Ensure sustainable consumption and production patterns, 13. Take urgent action to combat climate change and its impacts, 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development, 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss

Promotional Channels:

Promotion will be through;

- local media
- council
- science week website
- MYLI's marketing department (Social media, website, Eventbrite)
- branches (flyers, staff, tv display, what's on brochure)
- local schools (newsletter, flyers displayed)
- community groups (community house, Indigenous homework club, multicultural community group)

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$750

Estimated Audience Numbers: 60

Actual Audience Numbers: 60 – most participants were primary school-aged students.

Acquittal Report:

Myli – My Community Library celebrated Science Week by inviting Stem Zone to three locations to explore this year's theme Innovation: Powering Future Industries. Stem Zone hosted a workshop to explore different technologies and investigate how these can be used to create future industries and solve current issues.

The participants worked at different stations and solved problems using new technology. Many of the participants had not used this technology before, learning new skills and finding different ways to solve problems. The students also used the VR gaming system to play and explore.

The workstations explored different problems and offered solutions using different technology enabling participants to articulate new ideas. The creation station encouraged the students to engage their imagination and

explore new possibilities. The participants also explored the connections and relationships with new technologies and how they can offer different solutions to problems.

Locations: Warragul, Trafalgar & Drouin, Victoria







Feedback

All written feedback was positive. Here are some testimonials from the events:

- All my kids seemed very engaged.
- Fantastic
- Great events

Verbal feedback was also obtained:

- "It was fun".
- "I could have spent longer at some workstations and less at others".
- "I wanted longer to play with the robots".

The event could be improved by engaging parents in the activities (depending on the age group of the kids) or adding extra staff. This year's events were a little more challenging than the previous year's Science Week activities, as most of the participants were primary school-aged kids needing some parental or staff support. There were some children who had learning difficulties that needed some extra help from staff also.

Time Detectives: Cold Case

8/12/2023, Stonnington and 19/8/2023, Geelong, Vic

The National Trust of Australia (Victoria)

Event Description:

Archaeologists are time travellers. We use the everyday items of the past to build portals through time and space; windows through which we can view landscapes thousands of years old and the people and cultures that they supported. We analyse these everyday items through an ever-increasing array of scientific techniques to explore questions such as the age of artefacts, what they were made from, why they were made how they were used. In this session, you will work collaboratively with your Dig Team to help solve an archaeological cold case. Under the guidance of your Dig Director, you will be introduced to archaeological methodologies, tools and techniques and learn how to apply these to a simulated archaeological site. As Time Detectives, you will collect, recover, analyse and interpret archaeological evidence, interrogating different hypotheses along the way. At the end of the session, you will present your findings to the rest of team and make your case for the theory that you think best fits the evidence.

Project Aims & Expected Outcomes

Despite the long and complex archaeological record in Australia, public understanding of the discipline remains largely limited to its association with the classical cultures of Egypt, Greece and Italy, or else to fictional characters such as Indiana Jones. Since the 1970s, archaeology has increasingly incorporated scientific techniques into its multidisciplinary research strategies and today is a discipline embedded within STEAM. In these sessions - one in South Yarra, the other in Geelong - NTV Education provide the public with an opportunity to experience modern archaeology for themselves utilising place-based, object-based and experiential learning principles. Previous sessions run for National Archaeology Week in May 2023, using a different archaeological scenario at the simulated site, were received with much enthusiasm by both children and adults, and one of the most frequent types of feedback we received was how much fun people had while learning about the discipline. Through these sessions, we aim to introduce people to several key archaeological science methods, including bioarchaeology (human osteology), the reconstruction of past landscapes, zooarchaeology and dating techniques.

Categories of Science/Knowledge Explored: Chemistry & Materials, Environment & Nature

Target Audience Demographic: All of the above

Underrepresented Groups Targeted:

- Women and girls
- Rural, regional and remote communities
- People from a low socio-economic background

Aligned Sustainable Development Goals:

4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all

Promotional Channels:

The program will be promoted through the National Trust membership base and our school networks on the website, social media, and through articles and advertisements placed in local print media.

Funding Provided from Inspiring Victoria: \$975

Funding/Value Provided In-Kind: \$1380

Estimated Audience Numbers: 50 per venue (100 in total)

Actual Audience Numbers: 23

Acquittal Report:

This year, the National Trust of Australia (Victoria) hosted four National Science Week events at two of their properties – Como House in South Yarra, and Barwon Grange in Geelong. The events centred around participants helping to solve an archaeological cold case, using the simulated archaeological sites to learn how to collect, recover, analyse and interpret evidence of past people and landscapes. From this, the 'time detectives' (the participants) learned how to apply the scientific method, interrogating different hypotheses that they developed, based on the evidence collected.

The event aimed to introduce archaeological science to a wide demographic, and in this, we were very successful. Participants included individuals, families, grandparents, and aspiring archaeologists. The events were well-attended, ranging between 8-16 people each session. Archaeology is not a field of science that is well understood by the general public, and this was seen in the expectations of those who came (many expecting something to do with dinosaurs). Despite this, the hands-on nature of the event – a combination of object-based and experiential learning – proved highly effective in engaging the diverse cohort, and many commented (both children and adults) on the range of new knowledge that had learned.



Figure 1: Participants in the *Time Detectives – Cold Case* program, learning about archaeological science from Dig Director, Dr Georgia Stannard.

Locations: South Yarra, Geelong

Feedback:

"This was such an interesting event! I have learned so many things about archaeology." Vera, Grandmother.

"I've really enjoyed getting to dig at my very own archaeological site. Finding all the artefacts was really fun and I liked coming up with a story at the end."

Matt, primary school student

"I learn lots of new things about the history of archaeology, even learning what archaeology actually is! I'm so glad that I came along to this event. Even though I originally signed up for my kids, I've had such a great time. I've learned lots of new things and had fun at the same time."

Amy, Mum

"I will definitely be coming again to your next event!"

Simon, Dad

The events generated a lot of positive interest and were well-received. In 2024 we will review our marketing and promotion approach in light of the positive feedback – everyone who attends is highly engaged, so we need to increase our marketing and promotion reach to increase awareness. In 2024 we will offer more sessions across different days and times to capture a wider representation of local audiences. It would be ideal to source a marquee so that the events can be facilitated comfortably in wet weather. The locals in attendance appeared to appreciate the opportunity to develop archaeological skills, increase understanding of the purpose of archaeology, and increase awareness about how archaeology helps us to increase understanding of First Peoples communities and settler activity.

The National Trust of Australia (Vic) will continue to support its archaeology programs to complement and enhance heritage public program offerings.

Children's Activity Session - Solar Cars

8/16/2023, Bairnsdale, Vic

East Gippsland Shire Library

Event Description:

Children attend one of the East Gippsland Shire Library Centre's at either Bairnsdale, Lakes Entrance, Orbost, Paynesville, Omeo or Mallacoota where they will have the opportunity to be involved in a interactive session and learn about Solar Power. Topics covered will include: where solar power comes from, how its works, what we can do with solar power, examples of how we are currently using solar power in our day to day lives, and the benefits of using solar power to the community. As part of the one hour session children will listen to a presenter talk about Solar Power, participate in quizzes as well as make their own Solar vehicle. The event will be open to children aged 8-12 and their parents.

Project Aims & Expected Outcomes

Children will have a better understanding of Solar power and its uses and its benefits to the community.

Children will have a greater Interests in Science and engineering.

Children will have an activity to attend which is fun and engaging.

Children will have seen the library as place for enjoyments as well as learning new things.

Children will consider science or engineering as a career option.

Categories of Science/Knowledge Explored: Energy & Transport

Target Audience Demographic: Children (0 - 12 years), All of the above

Underrepresented Groups Targeted:

- Rural, regional and remote communities
- People from a low socio-economic background

Aligned Sustainable Development Goals:

- 7. Ensure access to affordable, reliable, sustainable and modern energy for all
- 13. Take urgent action to combat climate change and its impacts

Promotional Channels:

Flyers and Posters will be designed and displayed in Libraries across East Gippsland

Flyers will be sent to Primary schools across East Gippsland

Promoted through Mail chimp of which we currently have over 1300 subscribers.

Promoted on the Library Events page on the Shires Website and social media Channels.

Funding Provided from Inspiring Victoria: \$1000

Funding/Value Provided In-Kind: \$1000

Estimated Audience Numbers: 25 Bairnsdale, 20 Lakes Entrance, 15 Orbost, 20 Paynesville, 10 Omeo,

10 Mallacoota - Total 100

Actual Audience Numbers: 16 Bairnsdale, 12 Lakes Entrance, 9 Orbost, 11 Paynesville, 6 Omeo, ?

Mallacoota - Total 54

Acquittal Report:

This year's Science week Activity involved children attending the library where they learnt about solar power through a presentation by staff. Children were explained what solar was, how it was made, what its uses were now and into the future. Staff provided a local context by discussing the Community facilities locally with solar panels attached and the power that they generate, Children then had the opportunity to construct a solar powered car, which was quite technical - children needed to construct the car with tools and then to attach the solar components.

Children who attended the session did have a better understanding of Solar power and its uses; facilitators conducted a questionnaire of participants at the session with participants obtaining about 90% correct answers. The question was also asked in the evaluation, of which 80% reported a better understanding than prior to attending the session.



Verbal feedback from presenters suggested that children were more interested in science and engineering. Many of the participants and parents mentioned how much they enjoyed making the solar car and would enjoy attending similar activities.

Science week activities were offered across Library locations with Session being conducted at Bairnsdale, Lakes Entrance, Orbost, and Omeo

Quite a few of the attendees did not realize the range of activities the library offers, such as these activities during science week with a few commenting that they will be looking for more activities at the library. It was also great to see that a couple of the kids then took home some science-related material.

The fact that many of the children had a better understanding of this aspect of science and found the session so enjoyable it is hoped that a more longer-term interest in science as a career will develop.

NEIGHBOURHOOD HOUSES VICTORIA SCIENCE WEEK ACQUITTAL 2023

In 2023, through the generosity of the Inspiring Victoria program, Neighbourhood Houses Victoria was able to offer grants to Neighbourhood and Community Houses and Centres (NCHCs) to produce, advertise and deliver events during National Science Week.

This is the third year that the Royal Society of Victoria and NHVic have partnered to deliver these grants to NCHCs. In 2023, NCHCs were able to apply for \$1000 grants to cover the costs of their events.

All successful applications through our grant program needed to meet the National Science Week objectives to promote and encourage interest in science, engineering, mathematics, technology and innovation; and communicate the relevance of them in everyday life.

There were 22 grants that were awarded to NCHCs around the state for Science week events.

In 2023 there were over 50 hours of activities delivered and there were 1040 attendees reported across all events.

These are the target groups for the events, noting that there could be more than one target group for each event.

The state of the s	
Children (0 - 12 years)	20
Adolescents (13 - 17 years)	6
Young adults (18 - 24 years)	2
Adults (25 - 64 years)	4
Adults (65+ years)	4
Families	7
All of the above	4
First Nations People	4
LGBTQIA+ community	3
Migrant communities	12
People living with a disability	8
People from a low socio-economic	
background	18
Rural, regional and remote	
communities	6
Women and girls	13

What general category of Science did your event cover?	
Space and Astronomy	2
Innovation and Technology	4
Environment and Nature	5
Chemistry and Materials	6
Energy and Transport	1

The following are the number of events that worked towards each of the SDGs:

1. No Poverty	1
2. Zero Hunger	1
3. Good Health and Well-Being	8
4. Quality Education	18
5. Gender Equality	4
6. Clean Water and Sanitation	
7. Affordable and Clean Energy	2
8. Decent Work and Economic Growth	
9. Industry, Innovation and	
Infrastructure	3
10. Reduced Inequalities	4
11. Sustainable Cities and	
Communities	8
12. Responsible consumption and	
production	2
13. Climate Action	4
14. Life below water	
15. Life on Land	2
15. Life on Land	
16. Peace Justice and Stronger	
Institutions	
17. Partnerships for the Goals	

Name of	
Neighbourhood	
House/Centre	Alexandra Community Hub
Name of Science	, mortania. G. G
week event	HungryMinds
Date of event	08/15/2023
Start time	1:00:00 PM
End time	3:00:00 PM
Duration	2.0
Describe what you did at your National Science week event?	For National Science week we held 4 events for HungryMinds in during National Science week. They were held on 15, 16, 17 and 23 August and listed on the National Science week website as well as our own. HungryMinds events were held in various locations and in the local community and in partnership with the custodians of those locations namely; The Embassy of Ideas, The Alexandra Library, at our Neighbourhood house; Alexandra Community Hub and at Alexandra Secondary College.
What did you use the grant funding on	The grant funding was spent on marketing activities, i.e. engaging website manager to create listing, creation, printing of flyers about the event, materials, stationery, mathematical equipment, prizes and treats, facility hire and catering for the events. In kind, some room hire 3 of the 4 was received, in-kind promotion via social media and by partner organisations eg Alexandra Secondary College newsletter. In-kind contribution of time/labour of Murrindindi Shire Council library staff, community members and Alexandra Community Hub volunteers
What knowledge did you share with your community about Science during your event?	The knowledge imparted was focused around math, science and promotion of problem solving thinking. We included elements of an adventure to open minds to pretend that we are the first humans to tackle a problem with no readymade solution. This was customised according to the age and ability of the children who attended and activities were scaled up in relation to how the child responded to the first teaser activity. Expressing an idea or thought was rewarded rather whether there was a right or wrong answer. The aim was to give minds the time to wrestle with fundamental problems of math and science, try and invent original solutions, have fun and struggle but not learn not to be daunted by mental challenges.

	Although a slow start we are pleased with the impact and
	expression of interests to make this an ongoing program
	available to the community. We are currently working with
	Alexandra Secondary College (ASC to offer this on a regular
	basis to their students who are interested. We are also working
	at providing this for children and families that are not part of
	the ASC. These NSW events have generated interest in
	HungryMinds has become a launch pad for this to become a
	regular program, largely run by volunteers and hosted by
What has been the	Alexandra Community Hub at our hours and other locations as
impact/outcome of	the community desire is expressed. We are very pleased to
your Science week	see that this has also fostered family time and an alternative
event?	activity to those children that are not part of sporting clubs.

Name of Neighbourhood	
House/Centre	Aspendale Gardens Community Service
Name of Science week event	Science Spectacular
Date of event	08/18/2023
Duration	1.5
Describe what you did at your National Science week event?	Aspendale Gardens Community Service (103 Kearney Drive Aspendale Gardens) partnered with Mad About Science to celebrate science week. The event was aimed at children aged 3 to 5. Six workstations will be set up with a variety of openminded science activities, including: CHEMISTRY - Elephants tooth past, snow, eruptions and colour changing indicators. ELECTRICITY - Energy sticks, globes and circuits MAGNETISM-Magnet cars, magnetic wands and magnetic marbles. LIGHT & COLOUR - Kaleidoscopes, lenses & rainbow fireworks glasses. MINIBEASTS - Multiple specimens of bug and insects encased in resin, FORCE AND MOVEMENT - Mini Hoberman, rolling car, gyroscope & flying wing prop top. The workshop encouraged young people and their parents to become fascinated by the world of science. In the introduction, Anna Curran (Centre Manager) did the acknowledgement to country with reference to the wisdom and contribution of Aboriginal and Torres Strait Islanders to science.

Name of Neighbourhood House/Centre	Balla Balla Community Centre
Name of Science week event	STEM Buddy Intro to EV3 Coding & Robotics
Date of event	08/27/2023

Duration	2.0
Describe what you did at your National Science week event?	Balla Balla Community Centre partnered with STEM Buddy Coding & Robotics to deliver Intro to Stem Buddy Coding & Robotics and Afternoon Tea on Sunday 27th August at Balla Balla Community Centre. STEM Buddy delivered an educational, engaging and interactive demonstration of coding EV3 Robots to move forward, back, increase and decrease speed to follow a designated circuit. Children paired up and were allocated a laptop and EV3 Robot which they programmed to navigate to facilitator's instructions and finally around the circuit. The children were fascinated with processes and the smiles and feelings of accomplishment were evident. We had an afternoon tea break while the facilitator set up a drone activity where the children were given the opportunity to fly the drone via laptop using set coding. The event concluded with giving the children a gift bag containing a Rubik's Cube, Kinetic Sand and bookmark with Science Week, Stem Buddy Robotics and Balla Balla Community Centre logos.
What knowledge did you share with your community about Science during your event?	Science is fun and has so many applications in every day life. Science is fascinating and never gender specific. Science combines theory with fun interactive experiences.
What has been the impact/outcome of your Science week event?	Although a slow start we are pleased with the impact and expression of interests to make this an ongoing program available to the community. We are currently working with Alexandra Secondary College (ASC to offer this on a regular basis to their students who are interested. We are also working at providing this for children and families that are not part of the ASC. These NSW events have generated interest in HungryMinds has become a launch pad for this to become a regular program, largely run by volunteers and hosted by Alexandra Community Hub at our hours and other locations as the community desire is expressed. We are very pleased to see that this has also fostered family time and an alternative activity to those children that are not part of sporting clubs.

Name of Neighbourhood House/Centre	Brentwood Park Neighbourhood House	
Name of Science week event	Kids in the Garden	
Date of event	08/14/2023	
Duration	2	2.0

Describe what you	Our Science week events ended up taking place in two parts due
did at your National	to interest feedback we received. We had children gardening
Science week	and children doing science experiments in playgroup and in our
event?	art class.
What knowledge	
did you share with	
your community	the reactions between different elements and how it can change
about Science	their state. Gardening, is teaching children life cycles and
during your event?	environmental impacts.
What has been the	The children have been watching the garden grown and
impact/outcome of	continue to work on it. The art and experiments have shown
your Science week	children how things can change depending what you mix it with,
event?	and they have contained to use these skills in their programs.
What knowledge	
did you share with	
your community	Science is fun and has so many applications in every day life.
about Science	Science is fascinating and never gender specific. Science
during your event?	combines theory with fun interactive experiences.
	Although a slow start we are pleased with the impact and
	expression of interests to make this an ongoing program available
	to the community. We are currently working with Alexandra
	Secondary College (ASC to offer this on a regular basis to their
	students who are interested. We are also working at providing this
	for children and families that are not part of the ASC. These NSW
	events have generated interest in HungryMinds has become a
	launch pad for this to become a regular program, largely run by
	volunteers and hosted by Alexandra Community Hub at our hours
What has been the	and other locations as the community desire is expressed. We are
impact/outcome of	very pleased to see that this has also fostered family time and an
your Science week	alternative activity to those children that are not part of sporting
event?	clubs.

Name of Neighbourhood House/Centre	Fraser Rise Children's & Community Centre	
Name of Science week event	Creating Green Worlds: Terrarium Making & Environmental Education	
Date of event	08/15/2023	
Duration		2.0

In this interactive terrarium making workshop for children, they explored the fascinating world of ecosystems the environment and the impact of climate change. Through this hands-on activity they learned about the vital role off terrariums in promoting environmental awareness and sustainability. Children discovered how terrariums mimic natural habitats and provide a selfsustaining environment for plants and organisms. They understood their interconnectedness of living organisms and the surroundings. There were discussions focused on the importance of biodiversity and the effects of climate change on ecosystems throughout the session. Through the art of terrarium creation children increased their knowledge by selecting plans, arranging natural elements and observing the relationships between soil, water and living organisms. They also developed practical gardening skills and an appreciation for plant care. The workshop aimed to instil a sense of responsibility and inspire children to become environmental stewards. By connecting their terrariums to larger environmental issues the workshop aimed to help children gain a deeper understanding of ecosystem fragility and resilience. They were also encouraged to make informed choices and to take action to protect the plants ecosystems in the face of climate change. this event ran at Fraser Rise children's and community centre located at 46 city Vista court, Fraser Rise on 15th of August. We partnered with a local plant expert and gardener to deliver this workshop. Each child made their own terrarium while learning about all the above information with support of a parent to make it an interactive family experience. All materials where provided.

Describe what you did at your National Science week event?

We discussed why this amazing workshop was being offered, the funding received to make it available to families at no cost. We talked about how learning about science supports children with fostering their curiosity, critical thinking, and understanding of the world. We highlighted that this is achieved through hands-on exploration, encouraging questions, honing observation skills, introducing the scientific method, and highlighting the interdisciplinary nature of science and encouraged families to attend similar activities. We emphasised how science can empower children to become inquisitive, informed, and responsible individuals who appreciate how science influences and shapes our world. Information were provided regarding other science activities that families might be interested in attending and feedback was collected on programs that they would like to see happening.

What knowledge did you share with your community about Science during your event? Scientific understanding: through the terrarium making workshop, children developed a deeper understanding of scientific concepts related to ecosystems such as the water cycle photosynthesis and the role of microorganisms, they learned insights into how these processes contributes to the overall health and functioning of ecosystems. Climate change awareness: children learned about the scientific evidence behind climate change including the causes and effects of global warming. while children were busy making their little terrarium plants, the presenters talked about how human activities such as greenhouse gas emissions impact the earth's climate system. The workshop aimed that this scientific understanding will help children comprehend the urgency of taking action to mitigate climate change. Environmental science application: children learned how to apply scientific principles to create and maintain a healthy ecosystem. They observed and analysed how factors like light, temperature and moisture affect the growth an interactions of plants and organisms within their terrariums. Critical thinking skills: the workshop aimed to enhance children's critical thinking by encouraging them to ask questions, make observations, and engage in different discussions. Families were encouraged to continue having these conversations at home and a workshop facilitators provided their contact details to be available to answer any questions children have to keep their terrariums healthy and growing.

What has been the impact/outcome of your Science week event?

Name of Neighbourhood	
House/Centre	Glenroy NH
Name of Science	
week event	Let's Get Experimental!
Date of event	08/15/2023
Duration	1.0
Describe what you did at your National Science week event?	In partnership, Glenroy Neighbourhood House (GNH), Fizz Kidz, Melbourne City Mission (MCM) and STEM Birds provided 3 different fun and engaging activities for children of preschool to mid-teen age. As GNH being the host venue at 5B Cromwell St, Glenroy: On Tuesday 15/08 from 4pm to 5pm, Fizz Kidz ran a Chemical Reactions workshop having children aged 5 and up creating instant snowy slime and fizzing bath bombs. On Wednesday 16/08 from 4pm to 5pm MCM ran a Messy Science session having pre-school aged children making different types and textures of dough. On Thursday 17/08 from 4pm to 5pm, STEM Birds ran a Coding workshop having children aged 10 and up creating Apps and 3D models.

What knowledge did you share with your community about Science	That science is and involves many things, and very much part of
during your event?	our everyday lives sometimes without us even know it.
What has been the impact/outcome of your Science week event?	Providing fun learning activities for our young community members and their families, that they otherwise would not have had the opportunity to do.
Name of Neighbourhood House/Centre	Japara Neighbourhood House
Name of Science week event	Junior Lab Weigh it, stack it, magnetise it!
Date of event	08/15/2023
Duration	2.5
Describe what you did at your National Science week event?	The event took place at Japara Neighborhood House, with 70 children + parents/carers attending across two sessions filled with lots of learning through a fun and interactive exploration, experimentation, to learn about different scientific principles - weights, light and reflections, and magnets! Each activity had both purchased resources and make your own 'home' versions to highlight the low-cost ways parents/carers and children can continue to include STEAM in their everyday. A broad range of scientist and contributors from various backgrounds, ethnicity, and genders, were displayed and discussed, with a focus on how anyone can be a scientist. Inclusion of women and girls was further highlighted. The event was incredibly successful and we received very positive feedback from the community.
What knowledge did you share with your community about Science during your event?	- scientific principles (age appropriate) of weights, light and reflections, and magnets - 'home' versions of each STEAM resource to highlight the low-cost ways parents/carers and children can continue to include STEAM in their everyday broad range of scientist and contributors from various backgrounds, ethnicity, and genders, were displayed and discussed, with a focus on how anyone can be a scientist. Inclusion of women and girls was further highlighted.
What has been the impact/outcome of your Science week event?	Due to the overwhelmingly positive feedback from families, we will be running a scaled back version of Junior Lab fortnightly for a gold coin donation using the purchased STEAM resources.

Name of Neighbourhood House/Centre	Korana Noighbourhood House
Name of Science	Kerang Neighbourhood House
week event	Science is Fun
Date of event	08/20/2023
Duration	2.0
	Our event was held on-site and we had a variety of Science based activities and each child was given a STEM activity kit to
Describe what you	take home. We also partnered with the Bendigo Discovery &
did at your National Science	Technology Centre and purchased a family pass and they kindly
week event?	also donated 2 family passes, so we were able to give these as lucky prizes.
What knowledge did you share with your community about Science	
during your event?	That Science can be fun and it isn't as boring as kids think it is.
	That a fun event was provided to our community at very low cost
What has been the	of \$5 and that we were also able to provide 3 families with the
impact/outcome	opportunity to visit the Bendigo Discovery & Tech Centre for free
of your Science	as well. This will provide an even greater expereince in learning
week event?	about Science.

Name of Neighbourhood House/Centre	Kerrie Rd Neighbourhood House
Name of Science week event	Inquisitive Kids Program
Date of event	08/14/2023
Duration	1.0
Describe what you did at your National Science week event?	We ran two after-school workshops for primary aged children, with Fizzics Education. Children took part in a fun; hands-on workshops designed to educate and engage. With over 60 curriculum-linked incursions on offer, Fizzics Education excels at putting together an engaging and educational programme to bring science to life. Specifically, children learnt about 'Disastrous Science (Natural Hazards)' in the first session, and were CSI Investigators in the second.
What knowledge did you share with your community about Science during your event?	In the Natural Hazards and Disasters Workshop, participants explored the conditions that cause disasters on Earth. From volcanoes to earthquakes to meteorites, the workshop covered major issues in our world. In the CSI workshop, participants worked in groups to find clues via: fingerprinting and blood typing, facial reconstruction through computer and real models, hair and fibre analysis, fluorescence of oils and DNA

	comparisons, latent image detection, chromatography and shoe impression casting, evidence collection and more.
What has been the	A greater interest in science within our community and further engagement in the Neighbourhood House and our programs. By receiving the grant, we were able to offer these sessions for free which reached a greater number of community members
impact/outcome of your Science week event?	and provided access for all. We have received wonderful feedback about the inclusion of these sessions at the House.

Name of Neighbourhood	
House/Centre	Kyneton Community & Learning Centre
Name of Science	
week event	Shooting for the Stars
Date of event	08/16/2023
Duration	5.0
Describe what you	
did at your	Kyneton Community House Occasional Care hosted a Space
National Science	day that included Art and Craft, Books, An interactive rocket and
week event?	space station area and digging for moon rocks.
What knowledge	
did you share with	
your community	
about Science	We shared knowledge about space, the solar system and our role
during your event?	and place in it.
What has been the	
impact/outcome	Sparked a keen interest in exploring all things space related. We
of your Science	have followed the children's learning beyond science week and
week event?	seen the interest in the area continue.

Name of		
Neighbourhood		
House/Centre	Lorne Community House	
Name of Science		
week event	Science Show	
Date of event	08/14/2023	
Duration		2.0

Describe what you did at your	
National Science	Children from Lorne Kindergarten, Lorne Occasional Childcare
week event?	and other local families were entertained with science tricks
What knowledge	
did you share with	
your community	
about Science	
during your event?	The children learnt about gravity, chemistry
What has been the	
impact/outcome	The impacts extended into the educational programming of our
of your Science	childcare service and the stem items purchased with stimulate
week event?	the children for years to come.

Name of Neighbourhood House/Centre	Mount Eliza neighbourhood house
Name of Science week event	Make Science Fun!
Date of event	08/28/2023
Duration	1.5
Describe what you did at your National Science week event?	Due to staff illnesses during this time we supported our community with take home information on making and doing science experiments. We provided a showbsgs of experiments such as making bold bows, making your own slime and looking at the stars and trying to identify them.
What knowledge did you share with your community about Science during your event?	We had information provided from local community groups to include their information in the showbags such as local coastal environment groups.
What has been the impact/outcome of your Science week event?	Children of all ages collecting a showbags after MENH having to cancel in face session due to staff shortages.

Name of Neighbourhood House/Centre	North Dandenong Neighbourhood House	
Name of Science week event	Learn how to compost	
Date of event	08/16/2023	
Duration		2.0

Describe what you did at your National Science week event?	We had a guest speaker from the City of Greater Dandenong Waste Management team that came and presented to our participants on how to start composting at home and engaged the participants by delivering an interactive session. The participants had many questions surrounding composting, what to do and what not to do at home, what type of things you can use in your compost, how to recycle, what to put in your bins and which bins - it was a highly interactive and in-depth session where all the participants were interested in starting their own compost but wasn't sure where to start. We had a face-to-face session, in the centre for all participants, community leaders and staff to join.
What knowledge did you share with your community about Science during your event?	We shared the science behind how your rubbish turns into natural soil in 2-3 months times to use in your garden beds, to grow vegetables and fruits at home to reduce waste and create sustainable communities
What has been the impact/outcome of your Science week event?	As a result, we have had participants start up their own compost at home, not only participants as well as staff members. During the week of the event, we also discovered that the bin we thought was a recyclable bin at our centre kept going into the normal waste bins - therefore we spoke to Council and had this organised.

Name of Neighbourhood House/Centre	Oakgrove Community Centre
Name of Science week event	Coding & Robotics workshop for kids
Date of event	08/15/2023
Duration	2.0
	1. Coding & Robotics workshop -Tuesday, 15th August: We hosted a free 2-hour workshop for kids over 8+ age group along with Stem Buddy collaborator. Mega Fun Activities included: - Learning how to program robots on basic motor operations, sensor functions, and strategies in the battle ring Experience with basic Robot functions, Robo-Race and SUMO Fight Flying drones indoors with provided instructions and supervision Completing challenges with drones. The children worked in groups of two, which allowed them to collaborate and learn from each other, supervised by experienced instructors. 2. Worm Farming Friday, 18th August: Nature Playgroup families learnt how to use a worm farm and checked up on the decomposition
Describe what you did at your	happening in the new worm farm. Looking up close to check all 500 worms, which were happy in their new worm farm eating the
National Science	food waste. With the help of the Playgroup facilitator, the kids
week event?	also built a volcano that erupted with a chemical reaction from

	the alkaline baking soda and acidic vinegar reacting. Refreshments were provided.
What knowledge did you share with	
your community	
about Science	Nature Playgroup families had an opportunity to learn how to use
during your event?	a worm farm.
	Children were able to deal with and complete challenges with
What has been the	drones. They worked in groups of two, which allowed them to collaborate and learn from each other, supervised by
impact/outcome	experienced instructors. Children improved on socialisation,
of your Science	appreciation for the environment & science/technology and
week event?	improve their focus, hand-eye co-ordination skills.

Name of Neighbourhood	
House/Centre	Park Orchards Community House and Learning Centre Inc
Name of Science	
week event	Getting in Science
Date of event	08/16/2023
Duration	7.0
Describe what you	
did at your	Getting into Science introduced our young learners to be
National Science	introduced and experience science through establishing learning
week event?	zones to allow the young minds to investigate, test and try.
What knowledge	
did you share with	
your community	
about Science	the knowledge and experience was shared through our learners
during your event?	to their families and through our social media.
What has been the	The outcome has allowed for our young learners to find a new
impact/outcome	understanding and interest in science and technology. The
of your Science	learning zones that were established are now a continued
week event?	learning tool that we bring into our regular program.

Name of Neighbourhood House/Centre	Queenscliffe Neighbourhood House
Name of Science week event	Exploring Green Energy and Robotics: An Interactive Workshop
Date of event	08/19/2023
Duration	1.5
Describe what you did at your National Science week event?	During the Science Week Workshop at QNH, we explored renewable energy, focusing on constructing solar-powered wind turbines. We began by studying circuits and their components like batteries, wires, and switches, understanding how electricity flows through them. Shifting to renewable energy sourcesâ€"solar and wind powerâ€"we delved into their conversion processes. Solar panels convert sunlight into electricity, while wind turbines harness wind energy. The kids and parents had a great time putting the wind turbines together.
What knowledge did you share with your community about Science during your event?	We shared valuable insights about solar power, green energy, and basic circuitry with our community during the event. It was a wonderful opportunity to learn together and promote awareness about these important topics.
What has been the impact/outcome of your Science week event?	The impact of our Science Week event was significant. Kids and parents actively participated and learned how to build circuits, construct wind turbines, and understand the intricate workings of solar power. By engaging in hands-on activities, everyone gained practical knowledge and a deeper appreciation for sustainable energy solutions. The event fostered a sense of curiosity and environmental consciousness, leaving a lasting positive impact on our participants.

Name of		
Neighbourhood		
House/Centre	South Kingsville Community Centre	
Name of Science		
week event	Little scientist's big dream	
Date of event	08/17/2023	
Duration		1.5

Describe what you did at your National Science week event?	SKCC organized & successfully ran "Little Scientist's Big Dream" Science event & it was a tremendous success! The event details are given below again: 1. Date - 17th August 2023. 2. Time 4pm - 5:30pm 3. Location â€"South Kingsville Community Centre, 43 Paxton St South Kingsville VIC 3015. 4. Focus group: 2 groups: Children aged 5-7 age group and 8-12 age group. It was a facilitated science event run by 2 passionate trainers, and 2 staff members, 1 Volunteer which included: - Interactive exhibits & demonstrations covering various scientific disciplines, including physics, chemistry/ chemical reactions Each individual child got chance to do hands on science-themed experiments to learn new skills, and asked many questions Massive Lego tables was set up where kids were engaged in creativity & build many different models & towers Young participants wore science-relevant outfits/scientist lab coat, lab technicians costumes. Collaborators / Partnerships: • SKCC Preschool • Science education/events company • Local school • Hobsons bay city council network • NHVic Network
WCCK CVCIII	During our Science Week event, we shared knowledge through interactive exhibits and hands-on demonstrations spanning physics, chemistry, and chemical reactions. Children had the
What knowledge did you share with your community about Science during your event?	opportunity to conduct science experiments, fostering new skills while posing numerous questions. We also stimulated creativity with massive Lego tables, inspiring kids to build various models and towers. Young participants and their families, along with other people from the community, really enjoyed & achieved the spirit of discovery and learning.
What has been the impact/outcome of your Science week event?	"Little Scientist's Big Dream: Igniting Curiosity through Science Week" aimed to empower the next generation of scientists, thinkers, and innovators by fostering a love for science. By providing access to interactive exhibits, workshops, and engaging activities, we inspired a lifelong curiosity for science. So overall, our Science Week event sparked curiosity, engaged the community, and promoted STEM education.

Name of Neighbourhood		
House/Centre	Springvale Neighbourhood House	
Name of Science week event	Learn how to compost	
Date of event	08/15/2023	
Duration	2	2.0

Describe what you did at your National Science week event?	We had a guest speaker from the City of Greater Dandenong Waste Management team that came and presented to our participants on how to start composting at home and engaged the participants by delivering an interactive session. The participants had many questions surrounding composting, what to do and what not to do at home, what type of things you can use in your compost, how to recycle, what to put in your bins and which bins - it was a highly interactive and in-depth session where all the participants were interested in starting their own compost but wasn't sure where to start. We had a face-to-face session, in the centre for all participants, community leaders and staff to join.
What knowledge did you share with your community about Science during your event?	We shared the science behind how your rubbish turns into natural soil in 2-3 months times to use in your garden beds, to grow vegetables and fruits at home to reduce waste and create sustainable communities
What has been the impact/outcome of your Science week event?	As a result, we have had participants start up their own compost at home, not only participants as well as staff members. During the week of the event, we also discovered that the bin we thought was a recyclable bin at our centre kept going into the normal waste bins - therefore we spoke to Council and had this organised.

Name of Neighbourhood						
House/Centre	The Grange Community Centre					
Name of Science week event	Kindergarten Science Incursion					
Date of event	08/15/2023					
Duration	1.5					
Describe what you did at your National Science week event? What knowledge did you share with your community about Science during your event?	We ran two sessions with Mad About Science as an incursion for our Kindergarten and 3+ Early Learning classes at The Grange Community Centre. One of the sessions was a 60 minute session about living things, and the other sessions was a 90 minute introductory science workshop. Each session was attended by 30 children and also we had parent helpers attend the sessions. Our event shared introductory science knowledge with our smallest community members, the children in our kindergarten and 3+ early learning program classes. The children enjoyed learning about magnetism, electricity, light and colour, microscopes, and worms.					
What has been the impact/outcome of your Science week event?	Our event sparked an interest in science in our students - they were given the opportunity to explore topics and experiments that they may not have otherwise been exposed to. It also provided parents in attendance with topics for conversation and tools for further learning with their children. We believe this has had a strong and positive impact on our students.					

Name of Neighbourhood	
House/Centre	Warnnambool Neighbourhood Community Centre
Name of Science	
week event	Put the Fun into FUNgi
Date of event	09/16/2022
Duration	4.0
Describe what you	
did at your	Introduction into growing mushrooms, participants each to be
National Science	instructed to set up their own mushroom grow bags to grow
week event?	mushrooms at home
What knowledge	
did you share with	
your community	
about Science	Community took part in an educational class about fungi and the
during your event?	role it plays in the environment
What has been the	We had great community feedback - participants in the
impact/outcome	workshop have become connected throught he experience of
of your Science	growing their own mushrooms sharing stories about the success of
week event?	their mushroom grow bags.

Name of Neighbourhood House/Centre	Woodend Neighbourhod House
Name of Science week event	Breaker Space
Date of event	08/19/2023
Duration	3.0
Describe what you did at your National Science week event?	We facilitated a space were children were encouraged to take apart old electrical and / or motorised items that we had collected and / or received, pull them apart, discuss and work out what each part did and then encouraged to be creative and make things using the parts. The event was held at the neighbourhood house and was really well attended and feedback was very positive. We engaged a local it teacher and also utilised the skill set of volunteers from our repair cafe to help facilitate the session.
What knowledge did you share with your community about Science during your event? What has been the impact/outcome of your Science week event?	We sought to encourage finding old items and repurposing and / or learning from these items, but also to look for other ideas of ways of using old items that would generally just go to land fill. We have very positive feedback; we unsure whether as an indirect relationship but have had a higher enquiry into volunteering in our repair cafe and also interest in an ongoing breaker space program.

Name of Neighbourhood	Verrendille Carere unity Caretre					
House/Centre	Yarraville Community Centre					
Name of Science week event	Science in Action-STEM Robotics & Fermentation Kitchen Science workshops					
Date of event	08/20/2023					
Duration	2.5					
Describe what you did at your National Science week event?	YCC delivered two workshops. One for children who learnt the basic robotics, coding and electronics. They learnt how to design and build online games, animation and programing that was fun and interactive. They took home a small robot that they made using Lego. The second workshop was for adults who learnt the science of fermentation and the benefits of preserving vegetables in a healthy diet. The participants took home a jar of fermented food from the workshop.					
What knowledge did you share with your community about Science during your event?	YCC was able to share knowledge about science in everyday life. That science is not only educational but also fun and accessible to everyone and what science is in our everyday life					
What has been the impact/outcome of your Science week event?	Children and adults who attended now have a better understanding of science in the kitchen. Children were able to learn the basics of robotics and coding. The aim of the event was to ensure that children and adults from a CALD and low socio economic backgrounds could access the events.					





Media Coverage Overview



COVERAGE OVERVIEW



5,651 reports



>61M

potential cumulative audience



>\$8M

Advertising Space Rate (ASR) value

↓ 26% decrease in total volume

 \sim

trend

- **↓ 22% decrease in ASR**

Compared to 2022

LEADING MEDIA





8 articles





189 reports



WABC

714 reports



online

WABC

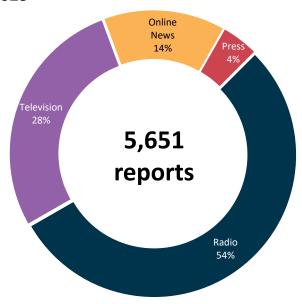
28 reports



Key Metrics



This report presents Isentia's quantitative media coverage findings for the national Science Week between 1 July and 31 August 2023



Media	Volume	Potential Cumulative Audience	ASR	
Total	5,651	61,093,699	\$8,233,343	
Radio	3,063	8,505,700	\$2,155,452	
Television	1,562	14,598,163	\$2,736,134	
Online	785	27,560,965	\$2,592,858	
Press	241	10,428,871	\$748,899	

 A total of 5,651 media reports (including syndication) mentioned National Science Week during the analysed period. This coverage had a cumulative potential audience of 61,093,699 and an advertising space rate (ASR) of \$8,233,343.

While the volume of reports on National Science Week decreased from the 2022 result, 2023 remained high compared to previous years

- The volume of coverage in 2022 was 7,635 reports, with a cumulative potential audience of 67,240,696 and an ASR of \$10,512,745.
- The volume in 2023 was a 9% rise from 2021, a 77% rise from 2020, and a 97% rise from 2019 (see Coverage by Year on page five).

- Consistent with previous years, ABC media outlets were the most likely to discuss National Science Week and associated events. ABC
 Online was the leading online news site, Radio National the leading radio station, and ABC and ABC News the leading television stations by a considerable margin.
- Consistent with the 2022 report, the leading television program to discuss National Science Week was News Breakfast on ABC News.
 Reports on this program were syndicated 1,012 times to ABC stations across Australia. This was an increase from 805 time in 2022.



Media Examples



Rafael Lozano-Hemmer's Atmospheric Memory headlines Science Week at the Powerhouse with epic interactive exhibit for existential reflection

ABC Arts / By Anna Freeland Posted Sun 20 Aug 2023 at 5:28am



Rafael Lozano-Hemmer has described Atmospheric Memory as "the most ambitious project" of his career. (Supplied:



Melbourne Museum: Science Week 2023 photo gallery

Melburnians flocked to celebrate National Science Week at the Melbourne Museum, SEE ALL THE PICTURES

Science Week to inspire next generation of innovators

Some of the most exciting implementations of STEM will be on show this National Science Week, with interactive and educational events taking place throughout Perth until Sunday August 20.

"These events are a great opportunity for students to explore different STEM topics and get more hands on than they often can be in the classroom," Inspiring Western Australia Manager Imogen Winsborough said.

"It's a wonderful way to put scientists and STEM professionals in front of students to showcase the diversity in STEM and break stereotypes." For more information, visit www.scienceweek.net.au.





Activities during National Science Week 2022.

Junior scientists have a blast as Science Week kicks off



Amber Henvey and Sky Collums check out old-school telephones.

Students enjoy Science Week fun

Charlette Martin

Schools across Eyre Peninsula got involved for National Science Week this month, launching rockets, making science kits and immersing themselves into the theme of Innovation: Powering Future Industries'.

If your child has not had enough, why not get involved and give this DIY science experiment a try in the kitchen.

Fruit juice caviar ingredients

250ml vegetable oil (chilled in the refrigerator)

100ml fruit juice such as apple or orange (Note: Do not use juice that contains pineapple, kiwi, papaya, mango, or guava, as the gelatine may not set)

1 tablespoon powdered gelatine*

Ice cubes

Pipette or spoon

Tall glass, small bowl, strainer and jug (for eftover oil)

*Vegan substitute: 1 teaspoon agar powder. In step 4, gently simmer the liquid for one minute.

What to do

Chill vegetable oil in the refrigerator overnight.

Add the fruit juice to a small saucepan and sprinkle the gelatine over the surface of the juice.

Leave to sit for five minutes.

Stir the juice mixture over a medium heat on the stove until the mixture is steaming hot and the gelatine has melted. Do not boil.

Leave the juice mixture to cool for 20-30 minutes, but do not allow it to set.

Pour the cold vegetable oil into a tall glass and place the glass in the small bowl.

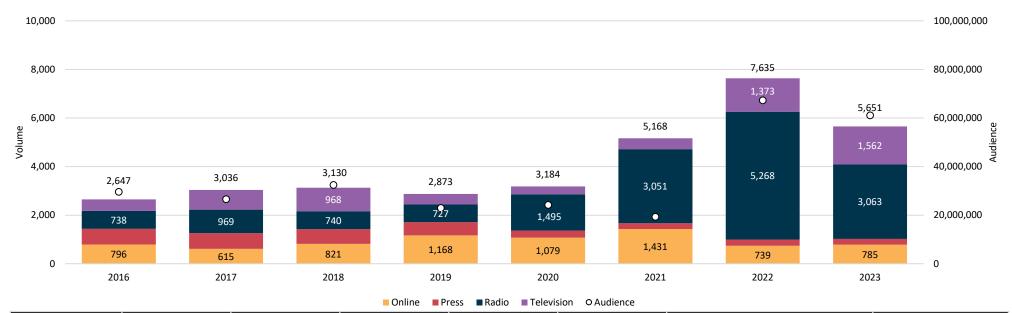
Add some ice cubes to the bowl to keep the oil cold.

Use the pipette or spoon to place drops of the juice mixture into the oil and watch as the drops fall down through the oil.



Coverage by Year





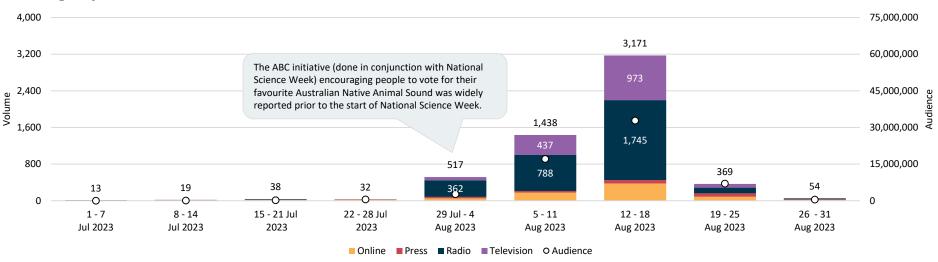
Year	Online	Press	Radio	Television	Volume	Potential Cumulative Audience	ASR
2016	796	641	738	472	2,647	29,612,250	\$8,681,949
2017	615	644	969	808	3,036	26,538,166	\$4,595,832
2018	821	601	740	968	3,130	32,407,255	\$7,644,094
2019	1,168	545	727	433	2,873	22,971,008	\$6,618,094
2020	1,079	286	1,495	324	3,184	24,176,879	\$5,215,740
2021	1,431	238	3,051	448	5,168	19,318,783	\$6,566,392
2022	739	255	5,268	1,373	7,635	67,240,696	\$10,512,745
2023	785	241	3,063	1,562	5,651	61,093,699	\$8,233,343



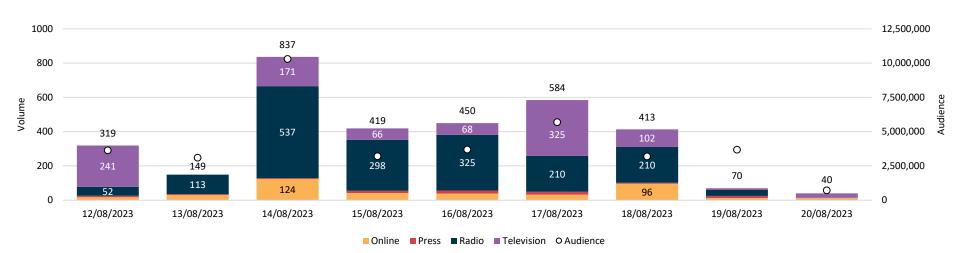
Weekly/Daily Trend



Coverage by Week



Coverage by Day During National Science Week





Leading State/Territory

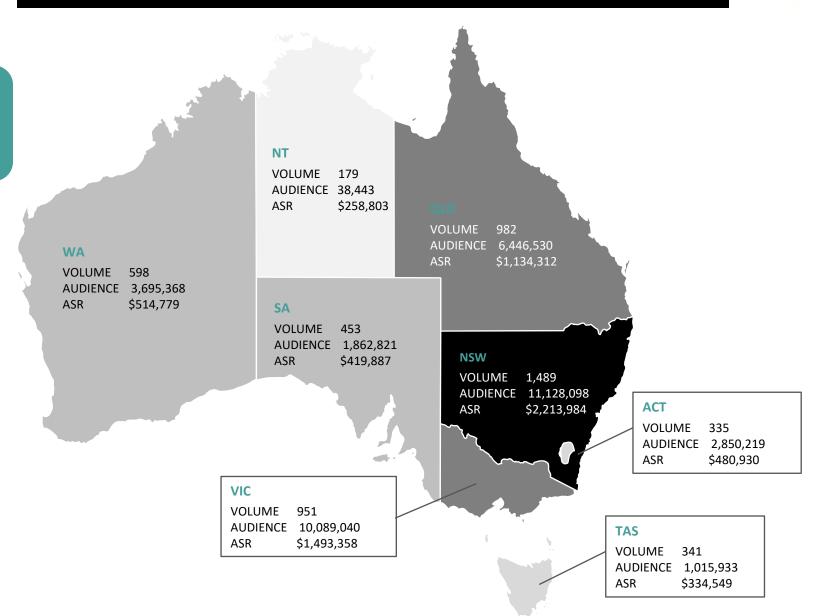


This location map displays the online, press, radio and television reports (including syndication) in the state or territory they were published or broadcast.

NATIONAL

VOLUME 323

AUDIENCE 23,967,247 ASR \$1,382,741





Coverage by Media and State



Press

State	Volume	Audience	ASR
NSW	76	3,284,691	\$297,991
VIC	55	3,704,419	\$165,957
SA	40	260,862	\$43,180
QLD	25	1,534,348	\$99,585
WA	17	903,718	\$39,172
TAS	16	394,887	\$77,252
ACT	8	334,146	\$22,600
NATIONAL	4	11,800	\$3,163
Total	241	10,428,871	\$748,899

Radio

State	Volume	Audience	ASR
NSW	898	2,773,400	\$708,353
QLD	613	1,157,300	\$297,362
VIC	534	1,987,000	\$462,575
WA	298	752,000	\$155,460
SA	261	701,000	\$189,986
ACT	180	1,135,000	\$100,501
TAS	169	N/A*	\$157,489
NT	110	N/A*	\$83,725
Total	3,063	8,505,700	\$2,155,452

Television

State	Volume	Audience	ASR
NSW	311	3,921,736	\$736,136
QLD	290	3,332,410	\$537,238
VIC	268	3,447,406	\$596,240
WA	244	1,465,585	\$249,865
SA	133	786,000	\$154,955
ACT	127	1,127,897	\$204,572
TAS	127	517,129	\$85,101
NT	62	N/A*	\$172,028
Total	1,562	14,598,163	\$2,736,134

Online

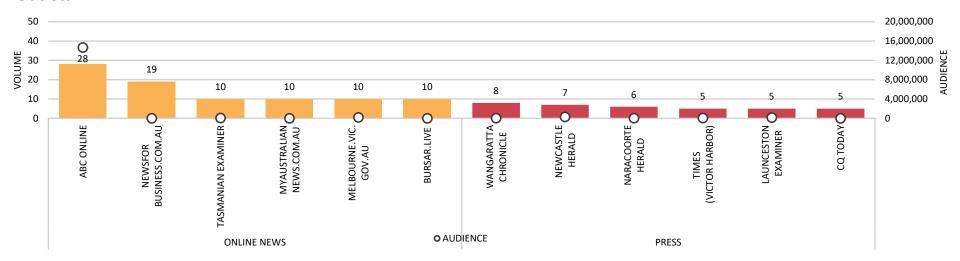
State	Volume	Audience	ASR
NATIONAL	319	23,955,447	\$1,379,578
NSW	204	1,148,271	\$471,504
VIC	94	950,215	\$268,586
QLD	54	422,472	\$200,127
WA	39	574,065	\$70,282
TAS	29	103,917	\$14,707
ACT	20	253,176	\$153,257
SA	19	114,959	\$31,766
NT	7	38,443	\$3,050
Total	785	27,560,965	\$2,592,858



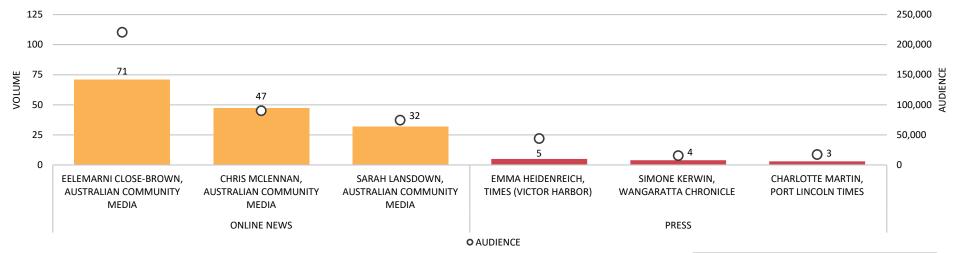
Leading Publishers



Outlets



Bylines

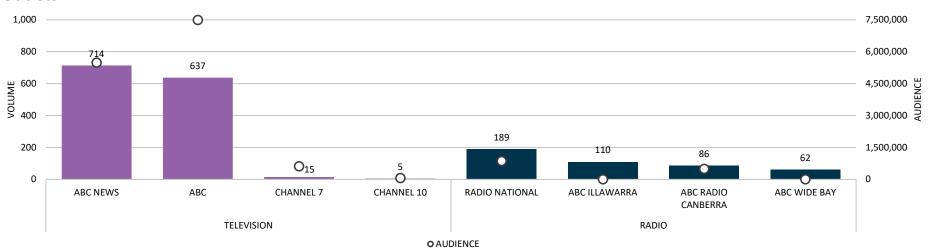




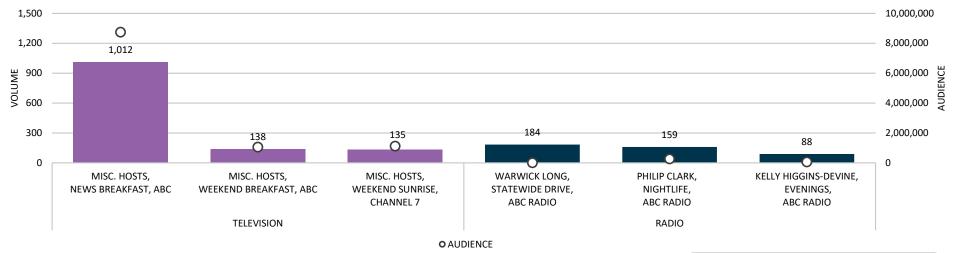
Leading Broadcasters



Outlets



Comperes





Isentia Media Coverage



Media Content

Coverage includes **press**, **online news**, **radio**, and **television r**eports that are ordinarily monitored by Isentia. This data is collated from established monitoring briefs, and/or manual retrospective searches.

- Press and online volumes include articles that are republished by/syndicated to various outlets.
- Radio and television volumes include syndicated news and programming that is broadcast on affiliate networks and stations.

Each report – including those that are syndicated – is counted as an individual item; and the potential audience/circulation figures are the cumulative total of these items.

Potential Audience/Circulation

Isentia gathers available audience and circulation figures from audited providers including the Audited Media Association, GfK Radio Ratings, OzTAM, Nielsen, and SimilarWeb. Isentia does not provide information published by unaudited media outlets or organisations. Therefore, figures for some media outlets are not available.

- > **Press** circulation figures reflect daily circulation or distribution numbers, and not readership estimates.
- Online audience figures are the sum of unique daily visitor numbers to that particular website, and do not reflect potential visitors numbers to / readership of individual articles.
- Radio and television audience figures vary according to daily peak listening times and programs, and are rounded to the nearest thousand.

Advertising Space Rates (ASR)

Advertising Space Rates are another quantitative statistic used to evaluate publicity. ASRs provide the cost of purchasing the equivalent amount of media space and/or time as advertising.

The ASR methodology used by Isentia is based on:

Print

- Casual column centimetre advertising rates
- Size of the content

Online

- Cost per thousand (CPM)
- Monthly page impressions
- Monthly unique visitors
- > Monthly stories served
- > Rate cards for internet (where CPM is unavailable)
- > Size of the content

Television & Radio

- > 30 second cost per thousand (CPM)
- > Timeslot average audiences
- Prime time 30 second rate cards (where CPM/audiences are unavailable)
- Duration of the content

*The ASR of each article or report is based on its entirety, and does not reflect the prominence or tone with which the organisation or event was mentioned.

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