scitech

Impact Report 2022-23

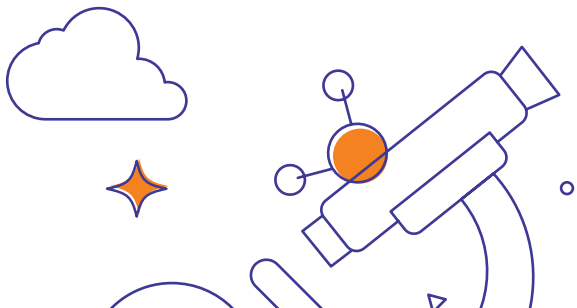
Acknowledgement of Country

Scitech respectfully acknowledges the Whadjuk people of the Noongar nation, who are the traditional owners of the land on which our Discovery Centre and offices are located. We are honoured to be welcomed as guests on lands in regional and remote across Western Australia.

We recognise Aboriginal and Torres Strait Islander peoples as the first STEM practitioners, and value their knowledge as engineers, problem-solvers and innovators of this land.

We pay our respects to the Elders past, present and emerging.

Content



Purpose

To inspire engagement by all Western Australians in science, technology, engineering and mathematics.

Values

Passion

We are passionate about Scitech and our purpose. This passion is the energy that inspires our excellence.

Respect

We are honest, respectful and look out for each other's well-being. We foster a supportive community by being open-minded and welcoming of people of all ages, genders, abilities and cultural backgrounds.

Innovation

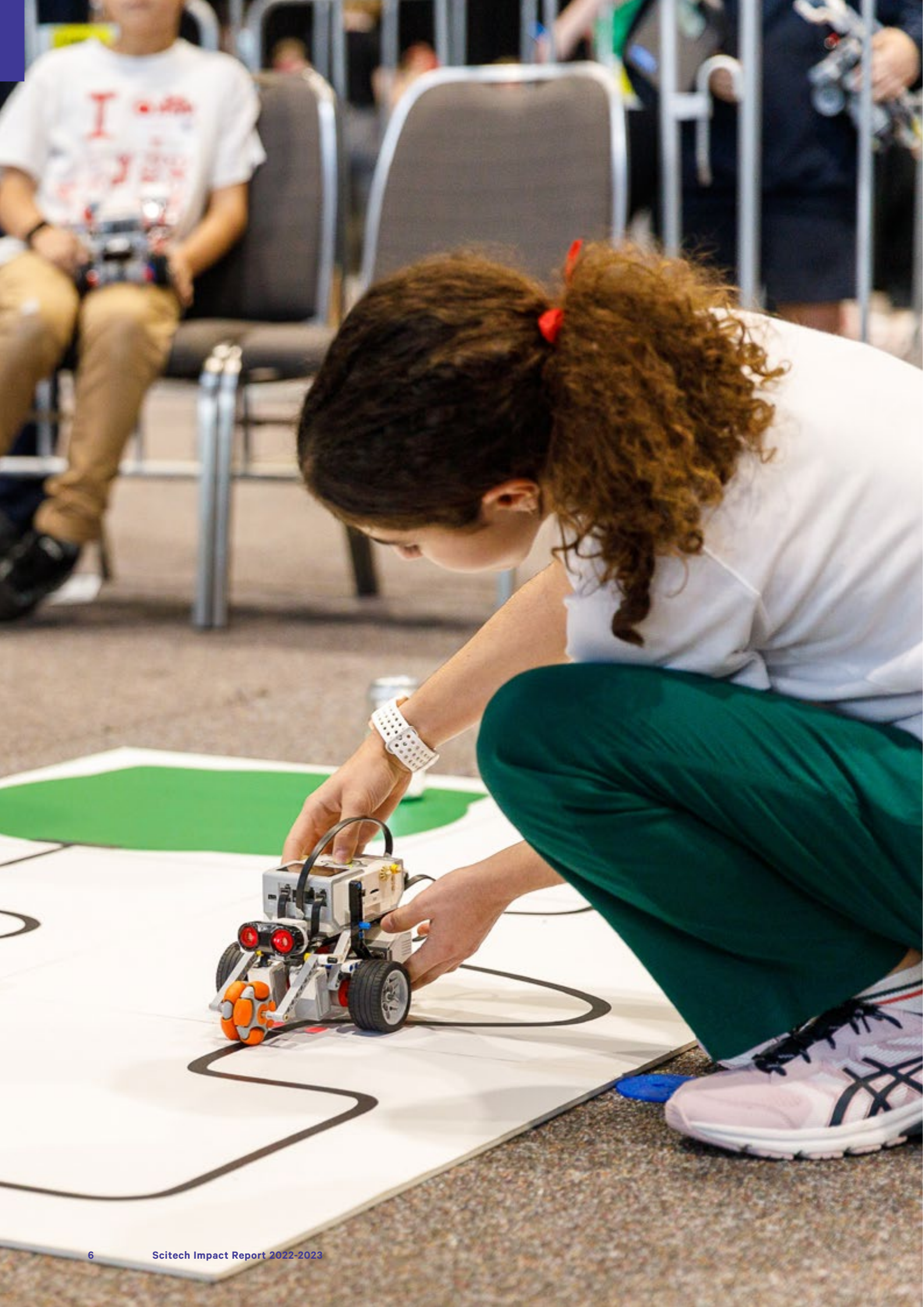
We encourage innovation and creativity. We learn and grow by working together.

Fun

We share the fun we have at work by including each other and the community, engaging our own curiosity and encouraging it in others.

Sustainability

We minimise our environmental footprint, responsibly using our resources and energy.



Scitech 2030 Strategy

Scitech's 2030 strategy sets out a vision on how we will support Western Australians with STEM capabilities and encourage STEM awareness which can deliver long-term economic, environmental and social benefits, and forms the basis for this report.

With the rise of new technologies in biomedicine, microfabrication, robotics and artificial intelligence, the ability to understand and apply data, and develop solutions to complex problems, will be essential job and life skills. Many of the children who interact with Scitech programs today will enter a workforce that includes jobs that do not yet exist.

The 2030 Strategy aims to deliver four key outcomes of inspired and engaged Western Australians, more confident and capable teachers and students, parents engaging in STEM discussions at home and a more informed public.

We will achieve these outcomes through key drivers of Inspire & Engage, Develop & Nurture and Connect & Collaborate which form the foundations of our impact in the community.

By encouraging greater awareness of STEM, digital technologies in society and children taking up STEM careers, we can safeguard our future and deliver economic, environmental and social benefits to all Western Australians.

Strategic Priorities

Drivers

Inspire & Engage

People learn best when they are engaged. Scitech will leverage curiosity, wonder, excitement, play and interaction with our audiences in STEM.

Develop & Nurture

Support the development of STEM skills through high impact experiences, nurturing an interest in STEM, and working closely with teachers.

Connect & Collaborate

The most effective way to engage all Western Australians in STEM is to partner and collaborate with other organisations and community groups that have a shared purpose and complimentary capabilities.

Enablers

People & Environment

Engaging the public with STEM requires dedicated teams of qualified, passionate and highly motivated people. Scitech will provide workplace environment, culture and opportunities that will attract and retain the best talent.

Building our Future

To maintain our existing capabilities, Scitech will increase its revenue from a range of sources. We will also invest in new capabilities to ensure that we are able to fulfill our ambitious purpose.

CEO Report

Scitech has been looking to engage Western Australians in STEM before the term even existed.

In the 1980s, three influential Western Australian figures - physicist Emeritus Professor John de Laeter, mining leader Sir Laurence Brodie-Hall, and politician and computing pioneer the Hon. Mal Bryce – asked the question: "If our future depends on science and technology, how can we get people inspired?" The answer was Scitech, opening our doors in 1988 with a mission to inspire the entire state's collective curiosity.

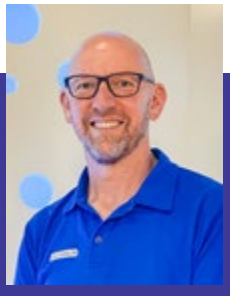
This continues to be our purpose now and is not only as relevant as it was 35 years ago but is possibly more relevant than ever. We have long understood the importance of getting young people engaged in STEM subjects to inspire them to pursue career pathways in STEM industries. This has evolved as technology has become more integrated across more industries, requiring STEM skills and literacy in a variety of occupations. Now as technology is incorporated into so many aspects of our lives, STEM skills and digital literacy are needed every day. As we reflect over the year, we recognise that Scitech's purpose has become even more crucial, to inspire STEM engagement and ensure our community is equipped with essential STEM skills now and into the future.

The Scitech 2030 Strategy was launched last year and acts as the foundation to this report, reflecting the key drivers of Inspire & Engage, Develop & Nurture and Connect & Collaborate. We have already made fantastic progress with this roadmap that will help us strengthen our approach and focus on achieving impact in the community through the programs, activations, events and engagements that we have.

The way we deliver our STEM engagement is evolving, with an increased focus on our digital delivery. Digital avenues open up the opportunity to reach more Western Australians and even national and international audiences. But we are also making sure that the interactions that happen online remain as meaningful as those we have face to face.

Not only does Scitech engage our audiences in STEM, but we also facilitate leading edge research. Through collaborations with research organisations, Scitech actively contributes to the scientific knowledge base while also assisting us in exploring ways to provide meaningful experiences for our audiences.

I am honoured to present the 2022-2023 Scitech Impact Report, and to be leading an organisation of passionate, creative and dedicated staff and volunteers who are achieving fantastic results on a daily basis. This report reflects Scitech's long-term commitment to the children of today becoming the workforce and community of tomorrow. Accordingly, we are carrying out the mission set out 35 years ago to create greater awareness of STEM which empowers our community, diversifies our economy, and develops our future workforce for Western Australia's long-term wellbeing, prosperity and sustainability.



Dr John Chappell
Scitech Chief Executive Officer

If we teach only the findings and products of science – no matter how useful and inspiring they may be without communicating its critical method, how can the average person possibly distinguish science from pseudoscience?

- Carl Sagan

Theory of Change

A robust evaluation process helps us measure the impact of our programs and experiences beyond short-term goals.

A Theory of Change framework helps map out the activity and provides guidance on impact evaluation. It details how a combination of programs or experiences are deliberately designed to achieve outcomes, and the intended audiences who will benefit from it[1]. In other words, it helps us understand and measure the link between all our activities and how they in combination lead to change.

Scitech's purpose is to inspire engagement by all Western Australians in science, technology, engineering, and mathematics and this was the foundation for mapping the organisational Theory of Change. Working backwards, desired short-term, medium-term and long-term outcomes that are prerequisites for engagement were broken down, allowing for Scitech's activities to be carefully considered against the final desired impact and our purpose, along with any gaps in the program offering as a whole.

In the short-term, Scitech aims to inspire and engage through gaining audience attention, inspiring positive attitudes to and demonstrating the relevance of science, technology, engineering and mathematics, with the outcome of generating interest.

The aim in the medium to long-term, is for Scitech to nurture this interest through carefully designed programs that develop relevant and transferable skills, confidence, and a personal value for STEM disciplines.

References

(1) Weiss, C. (1995). *Nothing as practical as good theory: Exploring theory-based evaluation for comprehensive community initiatives for children and families.* In J. Connell, A. Kubisch, L. Schorr, & C. Weiss (Eds.), *New approaches to evaluating comprehensive community initiatives (pp. 65–92).* New York: The Aspen Roundtable Institute.

Mapping Activity Against Theory of Change & FY 23 Result

Child	Wonderkids Podcast	
	Toy Teardown	
	School Excursion Program	
	Statewide Primary Science	
	School's Weather Wall	
		Challenge Days
		STEM Club
		Robocup WA Jr
Family	Toddlerfest	
	Scitech Discovery Centre	
		Astrofest
		Science at Home Webpage
Adult	Scitech After Dark	
		Particle & Elements
		Sky Tonight & Please Look Up
Teacher		Future Computing
		DIY Kits
		Lighthouse Maths
		Digital Technologies

Enjoyment	Interest	Relevant	Motivated	For me
97%	98%	95%	93%	95%

Short-term outcomes: Inspire & Engage

People learn best when they are engaged. Scitech will leverage curiosity, wonder, excitement, play and interaction with our audiences in STEM.

Engaged	Capable	Confident	Informal STEM participation	Intend to study STEM	Want STEM career
96%	92%	92%	42%	49%	41%

Medium-term outcomes: Develop & Nurture

Support the development of STEM skills through high impact experiences, nurturing an interest in STEM, and working closely with teachers.

Long-term outcomes

Western Australians participating in informal STEM, intending to study STEM subjects, and canting a STEM career.

Science Capital

Science capital is a conceptual tool for understanding the experiences, learning and role models that influence the formation of children's science aspirations[2].

It was developed by Professor Louise Archer and colleagues as part of the ASPIRES project (Archer, Dawson, DeWitt, Seakins, & Wong, 2015), and is based on Pierre Bourdieu's theories of social capital (Bourdieu, 1986). The more science capital you have, the stronger science identity (or belief that 'science is for me') leading to greater engagement with science.

Children with higher science capital have an increased likelihood of science study or career aspirations. Adults with higher science capital are more likely to engage in science-informed discourse and decision-making.

Science capital includes eight key dimensions, which Scitech uses as fundamental focal points of our social impact measurement. The eight dimensions of science capital are:

Scientific literacy:
knowledge and understanding about science, and how science works, including students' confidence in how much they think they know about science.

Knowledge about the transferability of science:
students' knowledge of the utility and broad applications of science skills, knowledge and qualifications.

Participation in out-of-school science:
how often students participate in informal science learning, such as visiting museums, zoos, science clubs and expos.

Knowing people in related roles:
having meaningful relationships, including family, friends, peers and community members who work in science-related roles.

Science-related attitudes, values and dispositions:
to what degree a student sees science as relevant to their everyday life.

Science media consumption:
how often students engage with science-related media, including TV, books, magazines and online content.

Family science skills, knowledge and qualifications:
the extent of the science-related qualifications, skills, careers and interests of a students' family members.

Talking about science:
how often students talk about science with key people in their life, such as friends, siblings, parents, neighbours and wider community members.

Through our various programs, activities, and experiences, Scitech has the opportunity to strengthen multiple dimensions of an individual's science capital. Our Theory of Change predicts that through repeated engagements with Scitech at the Discovery Centre, with the Statewide team in the community, and via our Digital Content offerings, Western Australians are given opportunities to increase their science capital.

References

(2) Archer, L., Dawson, E., DeWitt, J., Seakins, A., & Wong, B. (2015). *'Science capital': A conceptual, methodological, and empirical argument for extending bourdieusian notions of capital beyond the arts.* Journal of Research in Science Teaching, 52(7), 922–948. https://doi.org/10.1002/tea.21227

What is STEM Literacy?

At Scitech, we talk about the importance of STEM literacy and how we can foster this through our various programs, activities and experiences. STEM culture, awareness and literacy can support informed decisions and community sentiment around contemporary issues, and is one of the eight key dimensions of science capital. But what do we really mean when we say STEM literacy?

Being able to read and write used to be the general definition of literacy. Today, we are faced with a changing world of advancing technologies, so the meaning of literacy has evolved and now means so much more. A STEM literate person understands complex problems and innovates to find solutions. They use concepts from science, technology, engineering and mathematics and the skills, attitudes, and knowledge they have developed through a STEM-based education. This helps them to make informed decisions that can improve social, economic and environmental conditions in their communities.

A STEM literate person can demonstrate 21st century skills such as communication, collaboration, critical thinking and creativity, and apply these so they can:

- use sound reasoning to solve problems and make informed decisions
- evaluate information regardless of the topic for accuracy and relevance
- create connections in ideas and concepts
- understand how STEM content can relate to different careers.

At Scitech, we know that having a more STEM literate society can provide untold future benefits. A visit to the Scitech Discovery Centre can provide people and students with positive experiences and connections to STEM learning that can develop into a longer-term interest. This longer-term interest can turn into the pursuit of STEM careers, important in a world where a demand for STEM professionals continues to grow. By introducing as many kids to STEM learning and subjects as possible, we can meet this demand.

Through Scitech's professional learning programs, we support teachers by upskilling their capabilities in STEM subjects, giving them the flexibility to tailor their teaching to accommodate different learning styles and application to students regardless of their academic ability. Through our outreach work, we ensure that particularly in regional areas, we reduce barriers and increase accessibility for students and teachers to have the same opportunity to engage no matter how remote they are. This approach can bring social benefits such as diversity to STEM fields and inclusivity by extending our reach to a broader range of students.

We make STEM learning relevant, closing the divide between science and understanding so people can determine fact or fiction on global or environmental issues which can help long-term sustainability.

We don't know what the future holds, but by continuing to inspire Western Australians in science, technology, engineering and mathematics, we can contribute to a more STEM literate society by driving deeper engagement and emotional connections that will benefit our long-term wellbeing, prosperity and sustainability.

35 years of Scitech

1988
Scitech opens its doors on August 13

1989
Lung Room Exhibit

1990
Galactic Fantastic, Scitech's first feature exhibition opened

1991
Sportsworks Exhibition launched

1992
Space Dome, the portable Planetarium was first used, and still continues to be as part of Statewide tours

2000
Natural Disasters Exhibition launched

2001
Space exhibition launched

2002
Speed Exhibition launched

2003
Scitech co-built toys with Melbourne Scienceworks

2004
Horizon, now called the Scitech Planetarium opened in the original Omni Theatre

2012
Scitech's Aboriginal education Program launched

2012
Explore-a-saurus Exhibition launched

2013
Ingenious Exhibition launched

2014
The Rio Tinto Innovation Central gallery was developed allowing visitors to explore the innovation process

2015
Astronaut feature exhibition launched at Scitech before being hired by NASA Space Centre Houston

2016
Bionic Me Exhibition Launch

1993
Special Effects Exhibition launched

1995
A beautiful laser harp was created which used laser technology to create sounds and music

1996
Roadshow launches, our regional outreach program now called Statewide

1996
Flight Exhibition launched

1997
Discoverland opens in the Scitech Discovery Centre, our dedicated gallery for 2 – 6 years

1998
Whodunnit Exhibition launched

1999
Mission Earthling Exhibition launched

2005
Top Secret Exhibition launched

2006
The Scitech Discovery Centre underwent a full refurbishment with a new entrance introducing visitors to science in the past, present and future

2007
Amazing Backyard Adventures Exhibition launched

2009
Climate Change, Our Future, Our choice Exhibition launched

2010
Playing with Light feature exhibition won the ASPAC Creative Science Exhibit Award

2011
Rescue Exhibition launched

2018
Map Your World Exhibition launched

2019
Science Fiction Science Future Exhibition launched

2020
Earth Matters: Rethink the Future exhibition launched, inspired by innovations and solutions to help us adapt for a more sustainable future

2021
Scitech was at WA Day Festival for the first time

2022
Toy Tear Down, our first YouTube Series was launched

2023
Scitech engaged local and international audiences about the unique astronomical event, the Ningaloo Total Solar Eclipse

We Inspire & Engage

People learn best when they are engaged.

Scitech delivers programs, products, activations and experiences to all Western Australians that are exciting, interactive, invoke curiosity and wonder.

We are able to do this through the Scitech Discovery Centre, our Statewide teams travelling across the state so anyone regardless of location can have STEM engagement, and through a suite of digital resources that can expand and encourage more STEM experiences.

We believe in the importance of STEM learning to inform decisions, drive positive attitudes and solve real-world problems.

Case Study

Why “aha” moments are the best part of being a Scitech SciCom!

Scitech aims to make science open, understandable and accessible to everyone. One of the best and most essential ways we do this is through our Science Communicators.

Our staff in the distinguishable blue shirts are an essential part of Scitech’s ability to inspire and engage Western Australians. They play a crucial role in being part of the Scitech experience, disseminating scientific knowledge and understanding to visitors and promoting science literacy. They are also our best ambassadors and advocacy leaders that build trust in the community and ensure everyone has a positive feeling towards science.

Scitech chooses to invest heavily in this role across the organisation with Science Communicators found not only in the Discovery Centre, but as an integral part of our Statewide delivery teams that take science on the road throughout the metropolitan area with shows and activations, as well as touring to regional and remote areas across the whole state.

A Science Communicator's schedule varies week-to-week, from delivering smaller-scale intensive programs in schools to presenting Planetarium shows to large school holiday audiences. They are adept individuals that undergo extensive and ongoing training in performing shows and imparting knowledge and information to audiences that not only educates but inspires.

It is this inspiration and the changing of people's perception that "STEM is not for me", that Scitech Science Communicators Rob, Julian and Beth agree make a Scitech experience in the Scitech Discovery Centre or out in the community truly unique.

"The one-on-one interactions we have get people inspired, excited and shows them that science isn't just in a laboratory. We are doing science every day and we can do it in a fun way and sometimes without even thinking about it." Rob says.

Scitech Science Communicators come from a variety of backgrounds and tertiary degrees, however, it is their ability to tailor scientific messages and information to different audiences that is their foremost skill. Julian suggests that this is one of the biggest ways to influence people in their STEM behaviour, understanding, and attitude, especially in the longer-term.

"It's about knowing how to talk to various people such as a toddler, a teenager, a young adult or senior. Getting them to understand and communicate the science at various levels is a great part of our job. We add an understanding that we can all be scientists and there is a little bit of something in there for everyone which they can keep long after they have gone home."

Beth suggests that the highlight of being a Scitech Science Communicator is anytime visitors have experiences that go beyond their expectations, which can be incredibly rewarding and have the most impact.

"Sometimes that wow moment is mid-Planetarium show when you show them something they haven't seen and you hear the audience go ... ooohhhh. Or sometimes it's the end of the conversation and they go "ah okay". It's that feeling when you know that you have played a part in their discovery that is so amazing."

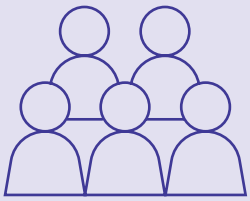
Rob adds, "It's the joy you get when something with someone finally clicks and they get it, and those general conversations you have with people and they realise ...wow... this is actually quite amazing."

"The one-on-one interactions we have get people inspired, excited and shows them that science isn't just in a laboratory. We are doing science every day and we can do it in a fun way and sometimes without even thinking about it."

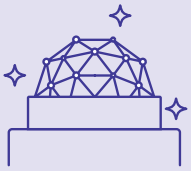
Scitech Discovery Centre

Scitech's Discovery Centre offers children and adults of any age the ability to be inspired and engage their mind through multiple areas and a diverse range of experiences.

296,025
Visitors to Scitech



Planetarium visitors
161,835



Planetarium shows
2,249

Chevron Science Theatre audience
91,056

Puppet shows/Big Stage shows
1,490

31,405
School Excursions Primary & Secondary students

99,961
School Holiday visitors

35,053
Toddlerfest visitors across the two festivals

Exhibitions

With four permanent galleries and 100 interactive hands-on exhibits, plus a themed feature gallery that changes every year, Scitech's interactive exhibitions built by our in-house workshop team never fail to encourage curiosity and interest, as well as surprise, excitement and delight.

Top Secret: Licensed to Spy which explores science, technology, observation, and data collection in a 1960's style mystery ended its popular run in October 2022. It was replaced by *Astronaut,* a hands-on exhibition with full-body displays, that allows visitors to investigate the reality of what it takes to be a space explorer and be captivated by the importance of science in space and space exploration. A video wall activation was added to the exhibition thanks to the Australian Space Agency who provided videos showcasing Australia's long involvement in the space industry as well our role in developing future space capabilities. They highlight how careers in space go beyond being an astronaut, with growing opportunities available for people with different skills across the sector.

Given the significant advances in technology, infrastructure, and funding in the Western Australian space industry even in the last ten years, the exhibition's timely return also provides a preview for the next generation of Western Australian children to think and explore what space industry skills and roles could be available for them in the future.

Reach

Total Visitation to Scitech Discovery Centre

296,025

The impact of learning while having fun at Scitech is most evident from the complete freedom visitors have to explore science concepts and information as they follow their own interests and impulses in the gallery and exhibition spaces. Scitech knows that people learn best when they are engaged and so experiencing STEM learning through any of our hands-on exhibits is so much better and more fun than just being told about it.

Teacher Feedback

"This was my first visit to Scitech and it met all our goals. The staff were fantastic and our students were very positive about their experience."

"I enjoyed watching my students have the ability to think outside the box. Those that possibly wouldn't get the opportunity to shine in the classroom, stood out today in other kinds of tasks and thinking."

Scitech Planetarium

A complex system of computers and projectors covers the 500m² Planetarium dome to create accurate recreations of the night sky and beyond, immersing visitors in a one-of-a-kind educational environment.

Western Australia is lucky to have the largest Planetarium in the country, which allows audiences a greater understanding of space and astronomy and gives them an appreciation of the beauty of the universe and our place within it. Through either the full-length guided presentations or short shows for early childhood audiences, the Scitech Planetarium provides visitors with a deeper appreciation for this natural science.

An upgrade of the Planetarium's operating software in early 2023 has improved the visual quality of presentations and provides an increased ability to expand into more diverse and multi-disciplinary content offerings. This has included the adults-only Dome Date Night event was which was welcomed back for the ninth year as part of the Perth Fringe World Festival, a special after-hours screening of the Disney film Wall-E, Pink Floyd's Dark Side of the Moon album show and new non-space film Angkor – The Lost Empire of Cambodia. The Planetarium also welcomed guest lecturer Tiffany Morgan, the Deputy Director of NASA's Mars Exploration program.

Reach

Total Visitation in the Planetarium

161,835

Total number of Planetarium shows

2,249

The powerful astronomical encounter of the Scitech Planetarium encourages interest and further learning.

Performance Spaces

Performance spaces throughout the Scitech Discovery Centre bring STEM concepts, such as experimenting, predicting and observations to life.

The Chevron Science Theatre is our feature performance space where presenters entertain and inform audiences in live theatrical experiences, telling the story of scientific endeavour and discovery. Improvements to the theatre's lighting and sound made for even more exciting shows in the past year.

Hot vs Cold was presented in the Scitech Discovery Centre for the first time in 2022, demonstrating hot and cold through the use of different materials. The popular shows *Supercool* and *Things that Glow* made a comeback for school holidays and schools excursions enjoyed the high-energy show *Power Trip*.

Using the core building blocks of science, observing, questioning, testing and interpreting, the Puppet Theatre continues to be a drawcard for younger visitors. Launching *Quiet as a Mouse* in the second half of 2022 saw us take on an ambitious show which presented a change in scale where the visitors were asked to imagine being very small, that is as small as a mouse. *Shipwreck* was also presented which explores themes of food, water and shelter and for younger school children, *Find It Fix It* which explores engineering, design and prototyping.

As an important tool to communicate scientific concepts in an entertaining and educational way, the Chevron Science Theatre and Puppet Theatre allows audiences to have an enhanced and memorable experience. A live show can explore relevant themes about the world around us and concepts like problem-solving, investigation and experimentation in a way audiences can engage and connect with.

Reach

Chevron Science Theatre Total audience

91,056

Puppet Theatre Total audience

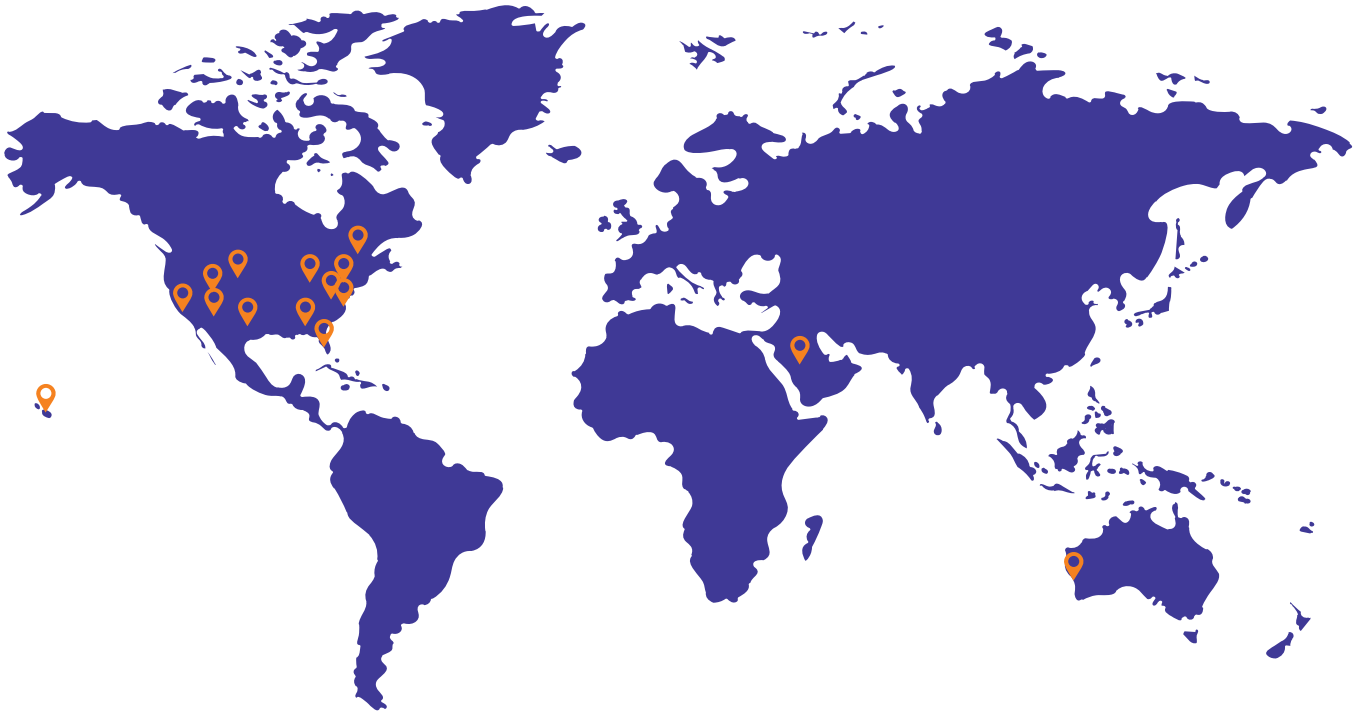
68,882

Scitech offers live shows that are not only engaging and entertaining but communicate STEM and science concepts that can pique audiences' curiosity. This can enhance the learning experience and broaden audience understanding regardless of age.

Touring Exhibitions

After inspiring the Perth market, feature exhibitions are leased to Science Centres across North America, Asia and the Middle East. International touring is valuable in expanding Scitech's outreach beyond Western Australia to global audiences. It presents a great opportunity to form partnerships and dialogue with other science museums around the world and promote Western Australia as a leader in STEM and innovation.

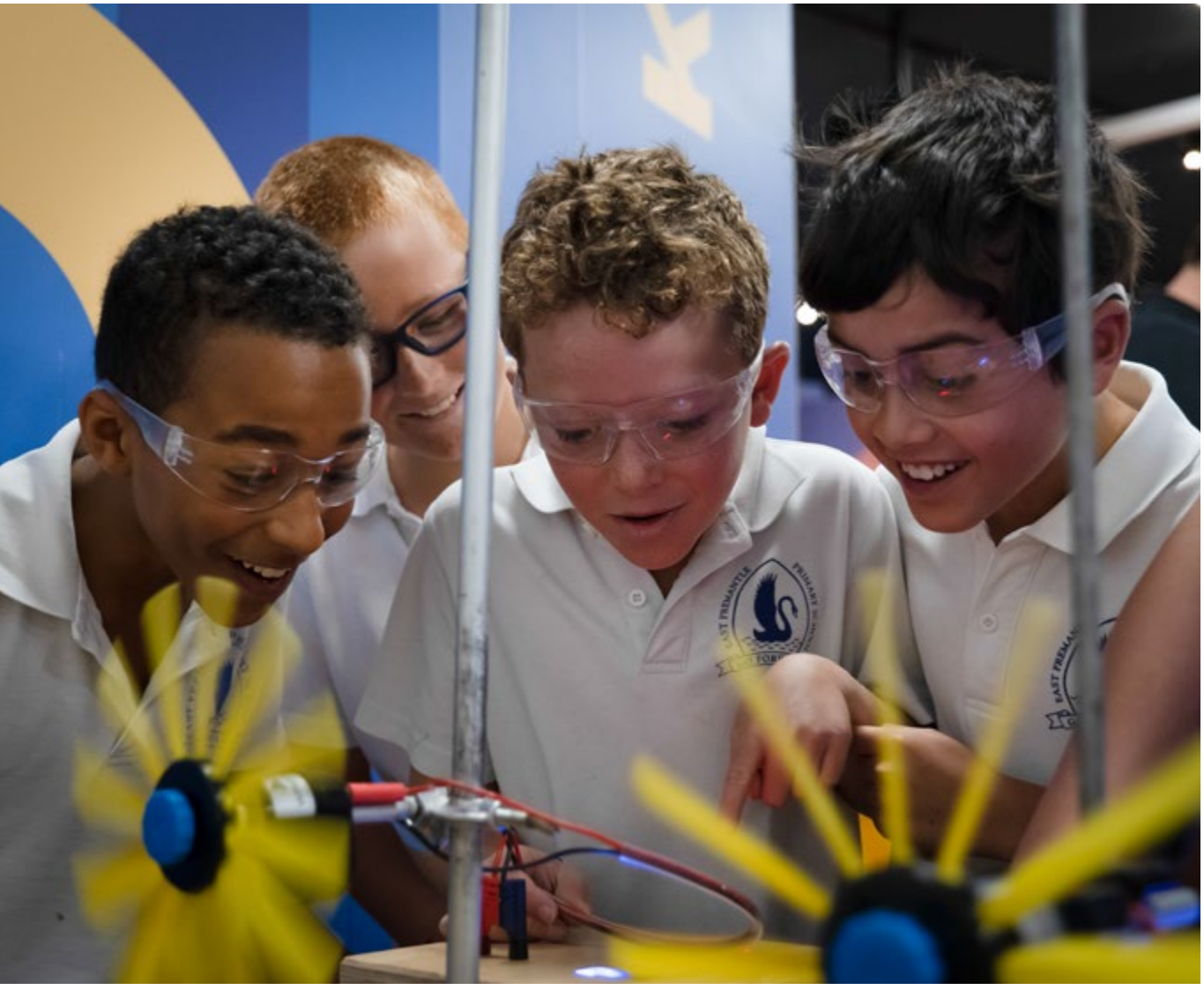
Touring Exhibitions	11
Locations Exhibitions visited	25



Exhibition	Location
Astronaut	Scitech, Perth
Backyard Adventures	Bishop Museum, Honolulu
Human Potential	Orlando Science Center, Florida MISK Foundation, Saudi Arabia
Earth Matters	The DoSeum, Texas Fort Collins Museum of Discovery, Colorado Orlando Science Center, Florida Spring Preserves, Nevada
Map Your World	McWane Science Center, Alabama
Going Places: The Tech of Transport	Fleet Science Center, California Arizona Science Center, Arizona
Planet Pioneers	U.S. Space & Rocket Center, Alabama Wings Over the Rockies Air & Space Museum, Colorado Jacksonville's Museum of Science and History, Florida
Playing with Light	Da Vinci Science Center, Pennsylvania Science Museum of Virginia, Virginia
Rescue	Springs Preserve, Nevada Virginia Aquarium & Marine Science Center, Virginia
Science Fiction: Science Future	Discovery Place Science Museum, North Carolina Cox Science Center and Aquarium, Florida
Speed: Science in Motion	Indiana State Fair, Indiana Sold to Hafar Al Batin, Saudi Arabia in November 2022
Top Secret: License to Spy	Scitech, Perth Discovery Place Science Museum, North Carolina Knowlton Museum, Canada

School Excursion Programs

Teachers in the metropolitan area continue to highly value excursions to the Scitech Discovery Centre as they support and consolidate material taught in the classroom, link key goals to the curriculum and inspire students through introducing new concepts. For students from Kindergarten to Year 10, Scitech school excursions offer an opportunity to have a fun and creative learning experiences and engage in STEM subjects in a way often not possible in the confines of the classroom.



Scitech Discovery Centre's feature exhibition always prove popular and are combined with excursion programs to provide a relevant, interactive and inquiry-based experience. *Top Secret: Licensed to Spy* proved popular in 2022 before its replacement *Astronaut* was launched.

School programs for exhibitions are created to support the practice of developing STEM skills such as questioning, predicting, observing and problem-solving. A new school program using the *Drop Zone* exhibit was created to better complement school excursions to the *Astronaut* Feature exhibition and enabled students to drop land craft they have designed and constructed and measure different variables such as acceleration and deceleration of its descent and landing.

While the educational impact of these excursions is strong, we also continue to focus on improvements to student needs, such as comfort, attention span and engagement with the activity, as well as addressing cost factors and transport challenges for schools.

Challenge Days

On top of regular school excursions, Scitech Discovery Centre hosts Challenge Days. Held in October 2022, this event is designed for gifted and talented upper primary school students across the metro area who can interact and collaborate with each other on challenges. Four challenges were spread across the Scitech Lab, Rio Tinto Innovation Central gallery, Scitech Planetarium and Explore Your World gallery. Under the theme of 'Space Race', a new format this year utilised more of Scitech's space and resources which was designed in response to customer insights from previous challenges. There were 671 students participating coming from the North and South Metro PEAC program, Catholic Education and public schools.

Impact

Students have a strong showing on how interesting and enjoyable they find school excursions to Scitech and how relevant they are to everyday activities. We continue to see teachers' beliefs remaining strong on Scitech being a trusted source of information and the role that Scitech plays in the WA STEM community.

Students Results

Interest and enjoyment for students	**98%**
Relevance that STEM is for them	**95%**

Teacher Results

Likelihood of discussing STEM with students	**83%**
I believe anyone can participate in STEM	**97%**

(Source: Post-excursion Educator Survey)

Teacher Feedback

"All the students said it was the BEST excursion they have been on. Brandi was a standout and couldn't have been more friendly, professional, informative & accommodating."

"The staff and educators were incredibly engaging and supportive throughout the entire day. The kids learnt so much and it was very seamless to transition from one part to the next. I only wish we had more time to explore!"

"Thank you for a fantastic day. Your staff were very helpful and the environment on offer is excellent for hands on engaging experiences for children of all ages."

Toddlerfest

Unique to Scitech is Toddlerfest, Scitech's bi-annual festival created especially for little scientists which offers a safe space and fun day out for children under the age of 5. The event is an opportunity for adults to not only be involved in hands on activities, but also understand the important role they have encouraging young children to be explorers and build on their learning through play.

Todderfest is an entry point to STEM learning for toddlers which is valuable in this early childhood group as they are beginning to develop their abilities to be curious, ask questions, solve problems and think creatively. Through specifically designed Toddlerfest activities, children can identify shapes, colours, recognise simple patterns, and explore sorting, stacking and counting, and in doing so, can start to foster independence, confidence and resilience.

More than 35,000 adults and children enjoyed the two festivals, with an average of more than 80% of visitors to Toddlerfest satisfied with their experience. The 2022 Winter theme *Little Explorers, Big Imaginations,* took visitors from the skies to the seas, the moon to the icy poles, and home again. In 2023, the summer theme was *From Small Steps to Giant Leaps* coinciding with the *Astronaut* feature exhibition, encouraging toddlers to explore the idea of travelling to space.

Parent Feedback

"The most memorable is seeing my kids faces and excitement especially when they learnt something new they expressed it was the best day ever and were amazed on the new things they had learnt and trying some of the STEM activities at home."

"My son really benefitted from all the exhibits surrounding the construction site. Working around the construction site saw him interact with other children. Learning to share and work together. Also all the ball activities surrounding that. His brain was definitely ticking working out how everything operated. Cause and affect. Loved it!!"

School Holidays

School holiday periods across the school terms are usually one of the busiest periods for general public visitation in the Scitech Discovery Centre.

An increase in staffing and the number of show offerings across the Chevron Science Theatre, Planetarium, and Puppet Show Stage helped accommodate increased capacity over the school holiday weeks. Extra activations such as pop-up science busks, 'Meet the Scientist' sessions, and extra hands-on activities in the Rio Tinto Innovation Central space further enhanced the school holiday visitor experiences.

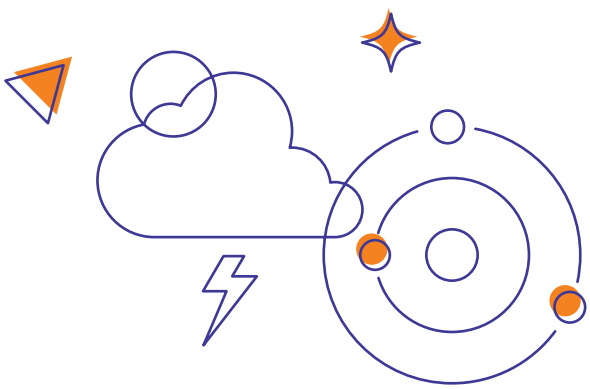
Partnering with other STEM organisations brings in a diverse audience and showcases important STEM disciplines and careers. Across the July, October and April school holidays, the Telethon Kids Institute ran 60-minute workshops for children aged 5-12 which drew in another 765 visitors. In the July school holidays, the St John Youth Engagement team brought in VR headsets, giving visitors the opportunity to experience first aid, interact with patients, learn how to provide assistance and call for help, all in a safe and virtual world.

The primary motivational drivers for visiting the Scitech Discovery Centre are spending time with family, having a fun and entertaining experience, and an educational experience. A visit to Scitech is designed to get families and visitor groups to share their ideas and opinions, and get conversations started so the experiences can be taken beyond the day out.

Nearly 100,000 visitors came to Scitech during the 14 weeks of school holidays, with 60% coming to Scitech for the first time in the past 12 months.

Impact

Scitech plays a highly influential role as a STEM destination that advocates for the relevance of STEM.



Post visit Results

Relevance of STEM in everyday life	**69%**
Anyone can participate in STEM	**93%**

(Source: Post-excursion Educator Survey)

Case Study

Total Eclipse of the Sun

On 20 April 2023, Western Australia experienced a rare astronomical event – the Ningaloo Total Solar Eclipse. The Ningaloo region provided the best location for viewing the eclipse, in particular Exmouth which experienced totality – 58 seconds of darkness where the moon fully covered the sun. Thousands of people from Western Australia, around the country and across the globe travelled to Exmouth to witness this phenomenon, while those in Perth could witness a partial solar eclipse with at least 70% totality.

The Ningaloo Total Solar Eclipse had a wide appeal to the broader West Australian community, as well as garnering national and international interest. Consequently, it presented a unique opportunity for Scitech to engage with a wide range of audiences including people who may not normally be interested in STEM topics. Scitech used a cross-platform approach to engage audiences in the eclipse including digital, community events, and in the Scitech Discovery Centre. This provided a number of touch points for audiences to engage with the experience and our content.

Scitech partnered with Science Centre Singapore on a livestream event. Singapore was expecting a partial eclipse, but cloud cover was likely to limit their visibility on the day. Our ability to send a team to Exmouth allowed us to provide Singapore's international audience as well as people across Western Australia direct access to the event.

Scitech Planetarium Coordinator Leon Smith crossed live to Singapore from Exmouth and throughout the almost two-hour livestream was able to provide informative and insightful commentary on the eclipse as well as answer questions from viewers around the world. The livestream was also a collaboration with Gingin Gravity Discovery Centre & Observatory which provided live telescope footage of the eclipse's progress. The online event was a first for Scitech with the livestream receiving a total of 54,944 views on YouTube, and gave Scitech an exciting opportunity to engage directly with a large international audience.

The event gave Scitech an extraordinary media presence with four radio spots and seven TV news spots, demonstrating Scitech as a trusted STEM source and our ability to communicate and commentate on significant science events.

As part of the Dark Sky Festival in Exmouth, Scitech's Statewide team delivered a popular activation and shows, with staff reporting people waiting outside for the activation to open, returning across several days, watching shows multiple times and staying the entire day. With more than 4,400 engagements in total across the three days, the highly engaging activation demonstrated how invaluable the experience was for regional audiences who are not often able to access them.

Scitech used a variety of digital platforms to engage people in eclipse content. A dedicated web page on facts about the eclipse and eye safety provided a valuable resource for educators and the general public. Included in a special edition newsletter for Scitech Members were exclusive activities and a colour-in poster custom designed by our Scitech graphics team. Social media engagement was high before and during the Total Solar Eclipse. Facebook and Instagram received multiple tags and mentions from families preparing for the event using the eye safety activities and showing great interest and engagement in the upcoming event. A photo taken by Scitech CEO John Chappell was posted shortly after totality on the day of the eclipse and became one of our most successful posts of all time receiving more than 3000 reactions, 76 comments and 54 shares on Facebook and 323 likes on Instagram.

In the Scitech Discovery Centre visitors enjoyed the curated Planetarium show A Voyage of Discovery, which simulated the Ningaloo Eclipse allowing visitors to learn about the eclipse and experience it both from the ground and in space. From a digital screen, the livestream was shown to visitors watching in the lead up to and during the eclipse's totality, with many also stepping outside of the City West building to experience the 70% totality. Scitech staff from across the organisation gathered with visitors and shared pinhole viewers and eclipse glasses to ensure everyone could catch a safe glimpse, extending and enhancing the astronomical event experience.

Through a successful cross-platform approach, Scitech engaged thousands of people regardless of their location through a suite of resources in-person and at home via digital. Being part of this event not only provided Scitech with valuable opportunities to extend the STEM experience and increase awareness, but also contribute to an important international event that brought the community together.

Reach

YouTube livestream with Science Centre Singapore

54,944
views

Ningaloo Total Solar Eclipse webpage (April)

6,282
views

Facebook Photo of Eclipse

More than
3,000
reactions

Scitech Activation at Dark Sky Festival (Exmouth)

More than
4,000
interreactions


scitech
SPIN

Statewide

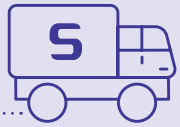
Scitech's Statewide team visits every regional and remote community every three years, engaging audiences with playful, interactive and engaging shows, workshops and extra-curricular activities.

Regional tours

16

Statewide teams travelled

72,000km

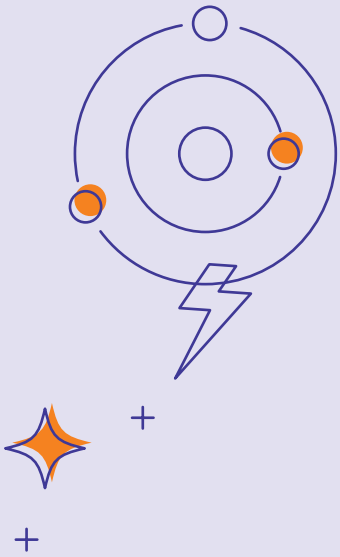


Primary School engagements

82,498

Secondary School engagements

6,865



Primary School Engagement

Early Childhood workshops

The Early Childhood program is designed for 0–4 year-olds and their carers to engage with everyday science experiences through play. Divided into four learning areas, *Light, Push & Pull, Living Things, and Sound*, children can explore the interactive environment to find answers to the questions: "why?", "how?" and "what if?". Supported by research in neuroscience, toddlers and young children learn through self-directed play with adults providing support, encouragement and modelling behaviour.

Early childhood workshops were delivered to playgroups and the general public in Bunbury and Albany and the Pilbara communities of Tom Price, Paraburdoo, Pannawonica, Dampier, Wickham and Karratha.

Reach

Children, parents and teachers engaged across three tours

3,796

By touring this Early Childhood program, children and adults living in regional communities are afforded the same access to STEM learning usually reserved for people living in the cities.

Parent Feedback

"My child has a development delay but still thoroughly enjoyed the session. It was so hands on and the instructors were great. So many new things for all the kids to play with."

"I loved how much the staff interacted with the kids. Whilst they were independently exploring all of the activities, the staff made time and effort to interact with all of the kids and parents. My boy had a blast!"

Primary Science shows and workshops

Scitech's Primary Science shows and workshops are designed to show students from Pre-primary to Year 6 that anyone and everyone can be a scientist. They encourage students to harness the process of question, prediction, experiment to explore the world around them and unravel its mysteries. Through engaging live shows and hands-on workshops, students use their natural problem-solving abilities, collaboration and creativity to see that science is all around us, is inclusive and lots of fun.

To ensure content is scientifically and educationally relevant, two new Primary Science shows, *Hands On* and *Mystery Hunters*, were introduced in early 2023. These shows focus on science inquiry, and owing to positive audience feedback from trials, will continue in the second half of 2023.

While Statewide delivery is focused on engaging regional audiences, National Science Week provides a special opportunity to celebrate science and technology with school students across metropolitan Perth. Scitech visited 33 schools in just five days during National Science Week in August 2022, and engaged more than 8,000 students.

Impact

One of the reasons incursions have such a strong impact on both students and teachers is due to the high calibre of the Scitech presenters. Staff knowledge, enthusiasm, engagement and organisation tend to be key highlights of the incursion experience and support the high levels of enjoyment and interest.

Teacher Results

Program or activities were enjoyable for students	**91%**
Program or activities help motivate students to want to know more	**94%**

Teacher Feedback

"The presenters were absolute legends and are perfect for the roles they are doing. The activities were also tailored to the student demographic and it was a really engaging incursion, great job!"

"Presenters presented at 'student level' and were engaging highlighting science and its importance in the real world and the student world. Able to have a whole school experience at different levels."

"It was the best one I've seen yet!! The presenters were so engaging for the students and really got them involved with the show/workshop. I love the way they challenged their thinking and the students loved all aspects of the show. They were talking about it for days."

(Source: Post-incursion Educator Survey)

School of the Air

Delivering science engagement, no matter how remote your location, is the priority for the Statewide team. Regular collaboration with the School of the Air allows isolated students to experience a hands-on science lesson through virtual workshops.

While on the Goldfields and Mid-West Primary Science tours, Statewide teams stopped by the Kalgoorlie and Meekatharra School of the Air campuses, engaging 52 students and their teachers in science experiments and lessons. To enable students to have a fully interactive and hands-on STEM experience, resource packs were freighted to students prior to the workshops. Under the guidance of the Scitech's science communicator they could see on their screens, students were able to change the density of water to make a golf ball float, make thermometers and create Cartesian Divers to explore the concepts of density, mass, volume and pressure. This allowed the isolated students to share the experience of discovering and learning together, just as they would in a typical classroom.


flights@sharkbayair.com.au

Secondary School Engagement

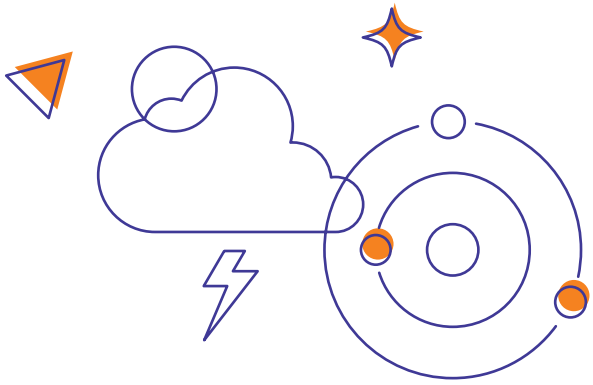
Secondary School Programs

Students in the early years of high school start to develop deeper knowledge in STEM subjects through school experiences which can have a positive influence on STEM subject selection in upper Secondary and future career aspirations.

Make it to Market is an innovative program for secondary students aimed at ensuring young people are equipped with STEM skills and knowledge to meet the demands of jobs needing people with STEM qualifications. It is predicted that in coming years, approximately 75 per cent of all new jobs will require STEM qualifications and skills so these programs provide a valuable introduction for secondary students starting to think about subject choices and career decisions.

Make it to Market is aimed at years 7-9 and applies industry-relevant design processes (understand, define, think, make, try, refine and share) to ideate and develop a solution to the problem of what to do with old tyres from mining vehicles on Rio Tinto sites across Western Australia. In this real-life scenario, students must also consider factors such as safety, environmental responsibility, cost and remoteness as part of their process and solutions.

The one-day program was delivered as part of Statewide tours to Bridgetown and Busselton, but also in collaboration with North Metropolitan TAFE as part of their Careers Taster Program in March and May of this year. Across all locations, 233 students and 26 teachers were engaged.



Regional STEM Festivals

Scitech headed to Kalgoorlie in November 2022 and Albany in May 2023 to host the Regional STEM Festival, an event that introduces regional students to what STEM opportunities exist with local and Perth-based organisations, and how they can pursue them.

School sessions across the two festivals gave 486 students an opportunity to meet with science professionals and organisations, providing a valuable point of contact between the two so students can hear firsthand about the relevance of pursuing a STEM pathway. This is coupled with a community session that invites people to come along and experience exhibitor booths, panel discussions and meet speakers who share their own career journeys and advise on the diverse pathways into STEM fields.

Impact

The most valuable aspect about a visit to the STEM Regional Festival.

Secondary Teacher Feedback

"Students were able to see a range of different employment options and the pathways they require. It was great for them to see that not all careers require completion of ATAR and a University degree."

'Students were introduced to a diverse range of agencies/employers in STEM and the variety of different job opportunities."

"Increased awareness of what is available in terms of stem careers in the local community"

(Source: Regional STEM Festival Educator Survey)

Statewide also supported STEM engagements at student career events in 2022-23:

Biological Earth and Environmental Science Day	96 students	Illuminate Enterprise Challenge	122 students
WAMTQ Awards	60 students	Game Changer Awards	48 students
St Mary's Anglican Girls' Schools i3 Program	173 students	TAFE's Career Taster Program	150 students

Case Study

Taking STEM learning to remote communities

The Aboriginal Education Program (AEP) allows Scitech to bring STEM experiences to some of the most remote communities across Western Australia, and indeed the world.

Delivered with support from Rio Tinto, the AEP aims to increase awareness and interest of Aboriginal students in STEM, and to build the confidence and capacity of their educators in delivering STEM lessons. The program's student workshops use culturally appropriate teaching and learning tools and practices to allow the science communicators to first connect with the students, and then introduce science in a relatable and meaningful way.

These hands-on workshops were revised and improved at the beginning of 2023 and focus on the development of science enquiry skills and enabling

student agency in experimenting and exploring science concepts. The AEP travelled throughout the Pilbara region in May, visiting communities only a few weeks after cyclone Ilsa passed through the area. As a result, one activity was a challenge to build a small-scale house to withstand a cyclone using a hairdryer and spray bottle. The students saw the direct relevance of this activity to their lives and enjoyed the sense of ownership that came with building something of their own.

The AEP's Professional Learning workshops showcase the value of using STEM as a cross curricular learning tool that builds capabilities in students across various subject areas including literacy and numeracy. The AEP introduced a new engineering focused Professional Learning workshop in 2023. During the one-hour workshop, teachers and Aboriginal and Islander Education Officers (AIEOs) explore four engineering-based activities, and are provided with resources and guides on how to deliver and link activities to the curriculum. Provided free of charge, these workshops equip teachers and AIEOs with increased confidence to teach STEM skills through hands-on engineering activities.

Due to COVID-19 restrictions preventing Scitech travelling to communities in 2022, the AEP pivoted to an online mode of delivery to ensure students and teachers were still able to access STEM opportunities. This included launching a new Virtual STEM Challenge component in July 2022 - the Ball Run Challenge. Students from 35 regional schools were challenged to use materials found around the classroom, their surrounding environment and resources provided in kits by Scitech to build a series of contraptions to set a ball in motion. The challenge was designed using the YESTEM Equity Compass to ensure it matched the specific learning needs of Aboriginal students. This included creating broad goals without setting low expectations, celebrating the successes of all students and using an engineering activity as Aboriginal students often excel at creativity and kinesthetics.

A Ball Run Challenge was chosen as it is adaptable and accessible to all year levels and encourages collaboration, creativity and resilience among the students. This was shown to be successfully achieved when the schools were requested to submit videos showing their Ball Run Challenges with a number of videos sent from regional schools showing the varied ages of students participating as well as the enthusiasm with which they engaged in the task. A compilation of these videos was created and shared with all participating schools, allowing students to feel connected to other students doing the same challenge. The outcomes were celebrated by displaying them on the digital wall in the entrance to the Scitech Discovery Centre for most of the 22-23 financial year.

The success of the Ball Run Challenge has led to the Virtual STEM Challenge becoming a permanent part of the AEP. In June 2023, a Foley Art challenge was virtually launched with students tasked to create sound effects for a short animation created by Scitech called Camp Dog's Day.

Total Aboriginal Education Program engagements

2,936

Ball Run Challenge engagements

Students from Kindergarten to Year 10 **513**

Number of teachers +AIEOs across 35 schools **77**


CONVERSE

We Develop & Nurture

We support the development of STEM skills, nurturing an interest in STEM.

STEM skills such as problem-solving, collaboration, critical thinking, communication and creativity are transferrable and beneficial for everyone.

Scitech continues to develop and offer quality experiences and resources that support and increase teacher confidence and capabilities. With STEM disciplines important STEM skills can help develop students' ability to identify, understand and solve problems in the world around them.

Lighthouse Maths Program

Mathematics is often seen as a subject that doesn't appeal to everyone and coupled with a common belief that "I'm not a maths person", students and teachers' confidence levels and ability to engage with learning and teaching maths can be greatly impacted.

Scitech's Lighthouse Maths is a year-long professional learning program that aims to improve teacher confidence and skill by using a problem-solving and reasoning approach to teaching mathematics. Across the 2022-23 year, the program included 315 Lighthouse Maths teacher sessions with 1085 and 4331 teacher and student engagements respectively.

The year-long Lighthouse Maths program focusses on developing teachers' daily classroom practice, by encouraging students to collaborate on problems to develop an understanding of how they reached a solution rather than simply learn a method. This allows students to better understand how maths can be applied in multiple scenarios, including in everyday life, which can help them better relate and engage with the subject.

The Powerful Problem-Solving teaching approach has also had a significant impact on student learning results. By measuring student performance using ACER Pat-Maths tests and comparing the results with average students' results, Powerful Problem-Solving students are progressing about seven months ahead of what is normally expected for a year's growth.

Chevron has partnered with Scitech since 2021 to deliver the Lighthouse Maths program, as well as the Powerful Problem-Solving Master Series and Mystery of the Mathematical Menace.

The Powerful Problem-Solving Master Series extends teachers learning experience and aims to increase their confidence to upskill their colleagues in their own school communities. It offers four extra units on advanced classroom techniques to teachers who have already completed the Lighthouse Maths program. There were 54 teacher engagements across 13 sessions in the past year with teachers attending from 10 different schools.

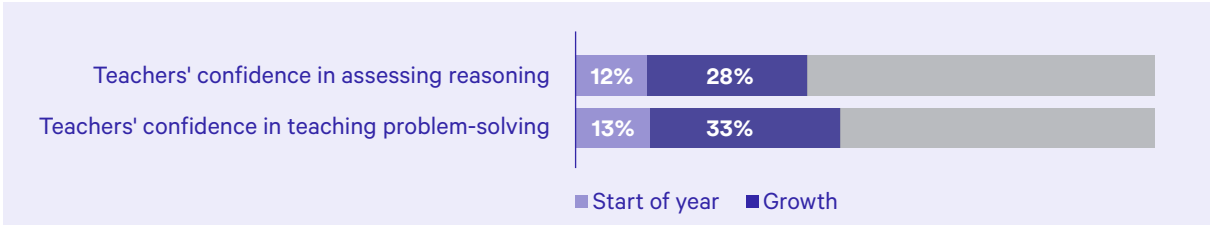
The Mystery of the Mathematical Menace is an interactive and free event run as part of the Lighthouse Maths program that invites parents, carers and students together to gather clues to solve the mystery and catch the culprit. Participants enjoy a fun experience using problem-solving, collaboration and creativity, with the mathematical puzzles allowing students to use skills developed through Lighthouse Maths classroom teaching.

In 2022-23, 14 events were run in schools with the popularity of the family activity supporting an increase in parents' and carers' maths awareness and learning, and seeing students improve their knowledge, skills and understanding of how maths can be applied to everyday activities.

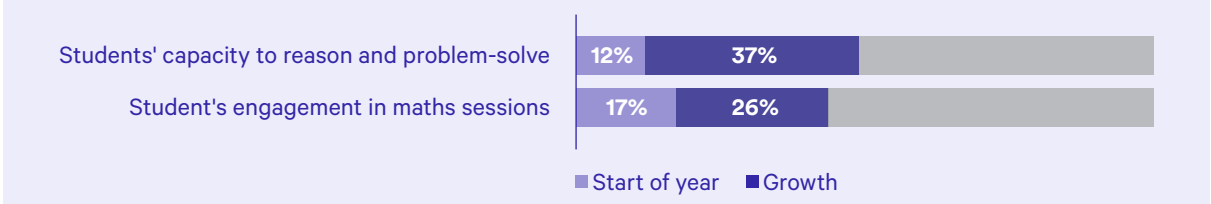
Impact

At the completion of the 2022 program, the impact was evident with teachers' confidence in assessing reasoning increasing by 28%, teacher confidence in teaching Powerful Problem-Solving mathematics increasing by 33% and student engagement in maths lessons up by 26%.

Teachers



Students



(Source: Lighthouse Maths Participants Survey)

Integrated Digital Technologies

To better support teachers in developing confidence in the use of digital technologies in the classroom, the Integrated Digital Technologies program merges best teaching practices and practical knowledge by incorporating technology to everyday learning across all subjects. Additional community events run as part of the program were designed to involve parents by making digital technologies feel safe and fun, with student STEM challenge days providing more engagement opportunities.

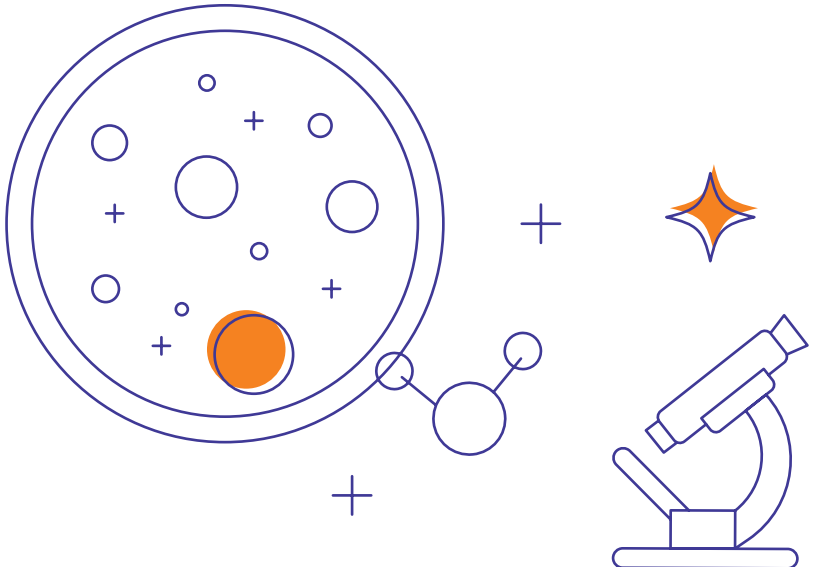
Supported by Woodside Energy, the program was run in Term 4, 2022, and achieved 156 teacher and 648 student engagements from eight schools. Teachers attended a launch workshop and participated in in-school consultations, along with receiving class sets of micro:bits, and student workbooks. Also delivered were the Catch a Hacker community events hosted by six schools, and additional STEM Challenge Day events, hosted by four schools.

Impact

Scitech's Integrated Digital Technologies is revolutionary in changing teachers' confidence with the use of digital tools in the classroom, enabling them to feel more comfortable using the technology across different subjects and in different ways. This in turn can enhance student learning and sometimes better cater for students' individual learning needs.

Agreed or strongly agreed that participating in the program increased their confidence in teaching Digital Technologies	**84%**
Agreed or strongly agreed that they felt they had a better understanding of how to integrate Digital Technologies into other areas of the curriculum	**95%**

(Source: Woodside Integrated Digital Technologies End-of-term Educator Survey)



Future Computing Program

Offered to one primary school each calendar year in the Pilbara region, the Future Computing program supports students' and teachers' engagement in Digital Technologies, Information and Communication Technology (ICT) and physical computing.

Through partnering with Mitsui, a school is provided with fully funded Raspberry Pi (PiTop[4]) computers and robotics accessories. Participating teachers received support through school visits and regular online consultations and classroom collaborations with Scitech's professional learning team for an entire school year.

In 2022 Tambrey Primary School in Karratha completed the program. St Paul's Primary School Karratha is the focus school for 2023, where Year 4 students have been exploring concepts including binary coding, Python coding basics and using the Raspberry Pi computers to write code. Likewise, Year 5 students have also been introduced to Python coding with a focus on branching and exploring computer components.

Reach

The Future Computing program has been able to improve the accessibility of technology for students impacted by educational barriers, due to their regional location. The program enables teachers to combine existing teaching strategies with technology to empower students and provide more varied learning opportunities.

Two schools participated in the program in 2022-23	
Teacher engagements	172
Student engagements	1628

STEM Club

STEM Club is a multi-week, after school program which allows participants to explore challenging STEM concepts and develop 21st century skills in an informal, safe and fun environment. The in-depth, project-based and student led nature of STEM Club enables deep exploration, and complex learning outcomes. Provision of complimentary, healthy snacks with STEM Club helps create a collaborative and safe social environment for participants, as well as ensuring students (and teachers) have the energy and brainpower needed to grapple with complex STEM challenges.

Delivered in partnership with Woodside Energy, STEM club is delivered free of charge, with schools selected based on ICSEA (socio-economic background of students), NAPLAN results, and the school's strategic alignment with the program. This program was delivered to 16 schools in 2022-2023, engaging 2,214 students and teachers.

STEM Club creates an environment where students can work collaboratively and be comfortable making mistakes as they plan, test and refine their projects, with one participant stating that "Making new things, making a bond with people and learning more stuff about STEM" was the highlight of the program. STEM club makes challenging STEM concepts accessible to students who may not excel or enjoy themselves in a science classroom setting.

All STEM club modules have undergone significant changes over the last year. The robotics modules boast next generation mBots with increased functionality, durability, and an easier user interface, allowing students to create and troubleshoot increasingly more complex programs. Updated Hummingbird animatronics kits likewise streamline the process for students to engage with this challenging and multi-layered project.

Parental involvement in STEM-related activities are key building blocks in a child's science capital, which is a good indicator of their intention to continue studying STEM subjects in higher education. STEM Club supports and promotes parental involvement, by inviting parents and other family members to the final session of the program. Students can show off and celebrate their achievements, while also consolidating their learnings by having them explain and demonstrate the intricacies of their project to family members.

Impact

Students rated their STEM Club experience very highly with most enjoying the building or coding aspects of their projects, learning new things and practicing problem-solving with friends. Interestingly, while science and engineering were consistently mentioned when students were asked about STEM careers, they also talked about new job categories and jobs that help people in the real world, suggested that students learned about new career pathways through participating in STEM Club.

Student results

Since I started doing STEM Club, I have learned new things	**92%**
Since I started doing STEM Club, I feel more confident doing problem solving	**94%**
Since I started doing STEM Club, I have gained new skills	**94%**

(Source: STEM Club End-of-term Student Survey)

Schools' Weather Wall

Scitech partners with 7NEWS Regional WA to support country primary school students to discover meteorology in the Schools' Weather Wall program, through the collection of local weather data, and participation in the television weather segment.

There were 1829 primary school engagements through the Schools' Weather Wall, across 59 participating schools this year. Schools were sent free weather measuring kits from Scitech to allow them to collect data such as temperature, rainfall, wind direction and cloud information across the whole school term. Once collected, the data is then sent to the television station so it can be included as part of the broadcast.

This initiative has had an enormous impact over the years it has been running. It provides a valuable entry point for children to take a vested interest in the weather and atmosphere and serves as an introduction to STEM. Understanding the weather can develop students' curiosity and science inquiry skills with a topic that is relatable for primary school students. An impactful aspect of this program is the public recognition students receive when they are featured in the live news weather segment.

Teacher Feedback

"It particularly assisted our students, who are very isolated out here and often feel no one knows about us here, to discuss our weather patterns and let the rest of WA know about us out here."

"Our students really enjoyed seeing themselves on the news and looked forward to it each week. We advertised it in the community and the parents then made comments about what the program was about."

[The Schools Weather Wall program was valuable for]
"Generating a home, school and community connection. Students seeing a real world connection of STEM."

(Source: Schools' Weather Wall Educator Survey)

DIY Kits

Scitech's DIY Science Kits are a hirable resource for teachers in registered Western Australian schools and contain everything they need to conduct up to eight weeks' worth of hands-on science activities and investigations in the classroom.

The DIY Kits are designed around the Western Australian Science Curriculum as developed by the School Curriculum Standards Authority (SCSA), with a DIY Science Kit for each of the science strands - Biological, Chemical, Physical and Earth & Space Sciences. This also includes Aboriginal Education Program versions of the kits for teachers predominantly in remote and regional locations. The kits contain the consumable and non-consumable resources needed to deliver the activities, along with downloadable digital resources. This format ultimately reduces time pressures on teachers having to create lesson content themselves.

In addition to the DIY Science Kits, there is also a DIY Telescope Kit, and a Robotics and Coding Kit.

There was an increase in the number of kits hired to both metropolitan and regionals schools in 2022-23, with 40 DIY Kits hired to metropolitan schools and 68 hired to regional and remote schools – of which 34 were Aboriginal Education Program DIY Kits. The continued interest in hiring the DIY Kits demonstrates the benefits this resource provides to teachers in the classroom. Teachers can make their science lessons and the explanation of scientific concepts more practical, with students able to enjoy the learning process in different areas of science through experiments and real-life investigations.

Reach

DIY Kits make learning fun and interesting. The versatility of the Scitech DIY Kits allows teachers to boost their confidence and skill in teaching science and assists in encouraging and connecting more students with STEM disciplines through enhanced and engaging lessons.

Across the 56 schools who hired 108 DIY kits there were:	
Primary student school engagements	**18,312**
Teacher engagements (Metropolitan)	**123**
Teacher engagements (Regional)	**144**

Case Study

Essential Digital Skills

Revolutionising the way Digital Technologies is taught in the classroom is the Alcoa Digital Technologies Enrichment Program, designed to equip students with the necessary digital skills to adapt and thrive in future workplaces.

Alcoa Real World Digital Technologies is a term-long program launched in late 2022, which runs alongside Alcoa Champions of Digital Technologies, a year-long professional learning program launched at the start of the 2023 school year. Both programs were run in the Kwinana and Mandurah/Pinjarra areas.

The two programs provide primary school teachers with support and resources, including a class set of micro:bits, to increase teacher confidence and capabilities in integrating digital technologies into daily teaching across all subjects. Coding micro:bits, for example, can be used in a literacy lesson to increase student engagement in exploring storytelling and narrative structure, or a numeracy lesson can be enhanced with the use of a micro:bit, to learn about data collection. This approach also facilitates the development of STEM skills such as problem-solving, creativity and collaboration in all areas of the curriculum.

Calista Primary School Year 4 and 5 Teacher Jasmine Beynon and Digital Technologies Specialist Teacher Elaina Lam are previous Alcoa Real World

Digital Technologies participants and are currently part of Alcoa Champions of Digital Technologies. They said that through lessons which integrate the resources provided by the program, their students have become more independent and are embracing inquiry-based learning.

“I’m seeing the students gain the ability to problem-solve at a higher level without us telling them exactly what to do every step of the way,” Jasmine said.

“They’re more inquisitive as they’re not stopped by doubting whether they can do the task, because they know it’s about having a go and asking questions of themselves and each other to figure out the problem. Seeing students of all ability levels have that self-motivation and pride when they discover they can code is my favourite part of the program,” Elaina said.

The program includes a community event called Catch a Hacker. This is an important aspect of the program, as it brings parents and students together to participate in a problem-solving activity, allowing them to see their children’s digital technologies knowledge and skills in action.

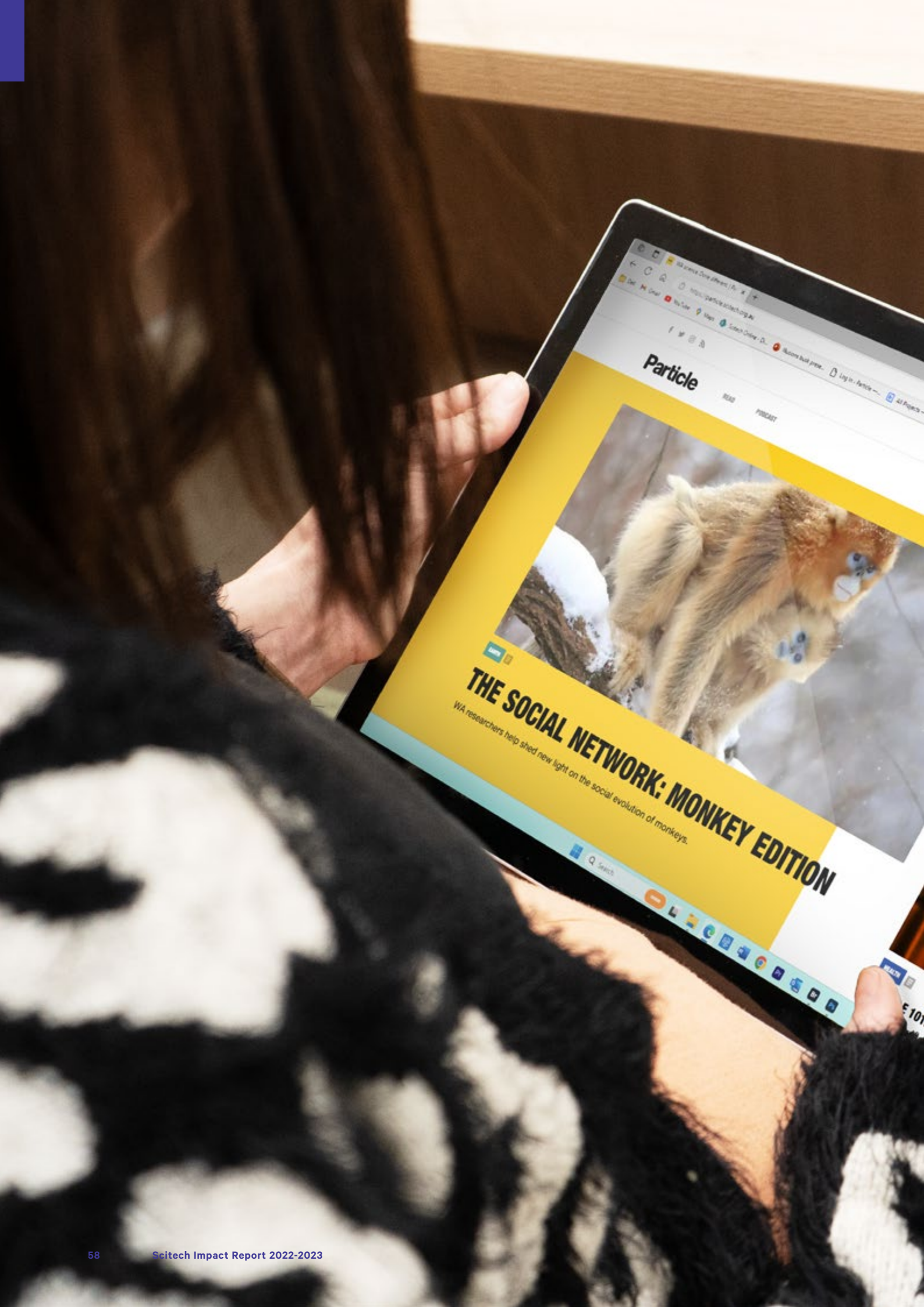
“Our community engagement is an area that we are trying to develop. One of our big first events after COVID-19 was Catch a Hacker and being able to be supported by Scitech to run a community event was hugely impactful,” Jasmine said.

“We had really positive feedback from parents and families that attended who asked when we can do one of these events again. It was a really nice thing families could do together, and was free to attend which, as we’re in a low socio-economic area, the parents really appreciated,” Elaina said.

Jasmine and Elaina said working as part of a collegiate network of teachers through the program has been a wonderful professional growth opportunity, further extending their skills as leaders in their school.

“It’s been great to see what approaches other schools have taken with the program, and we’re able to grow and learn new skills together,” Jasmine said. “That alongside the coaching from Scitech has enabled us to take these skills back to our peers at Calista Primary School and to support them with implementing technology into their classrooms.”

	Alcoa Real World Digital Technologies	Alcoa Champions of Digital Technologies
Student engagements	78	667
Teacher engagements	148	88
Participating schools	12	5
Participating schools	439 primary school engagements delivered at 8 schools	N/A


Particle
THE SOCIAL NETWORK: MONKEY EDITION
WA researchers help shed new light on the social evolution of monkeys.

Digital Content

A digital science experience

A strong digital presence increases our reach and impact by creating quality and engaging content that can appeal to a wider range of audiences and increase our visibility in the digital landscape.

Launched in 2017, *Particle* is Scitech's digital media platform designed to deliver science content to the 15+ market. With an aim of celebrating science and making it relevant and approachable to WA youth, written articles are the mainstay of the publication while expanding into other content such as podcasts, newsletters, pop-up quiz nights, and social media.

This year placed a focus on publishing articles that not only satisfied the general curiosity of our audience, but ensured they aligned more closely to relevant news developments around the globe.

This change in editorial direction helped audiences get an understanding of larger national and international issues through the lens of Western Australian research. For example, the article titled *Helping green hydrogen out of the lab* was commissioned because of the national interest federal politicians were building around hydrogen as an energy source. Another example is, *Fighting bacterial infections faster*, an article commissioned to highlight how WA researchers were helping to address the increasingly important issue of superbugs becoming more and more common across the globe.

Consistent figures for website page views again this year suggest that *Particle* is successfully identifying the issues that our target audience is curious about and communicating with them using relevant language and topics.

Reach

Individual page views on Particle website	**153,000**

Toy Tear Down launched

Scitech produced its first YouTube series *Toy Tear Down*. Hosted by one of our enthusiastic Science communicators, *Toy Tear Down* dissects popular toys to reveal the science behind how they work, while linking them to real-world applications. The new video series is an innovative approach to digital content engaging primary school-aged audiences, along with their parents and carers through YouTube.

Having a dedicated YouTube channel for this series gives Scitech another opportunity to connect and share with the community which is proving popular after seeing significant growth in audience numbers and engagement


PODMIC
Leon Smith

Case Study

STEM in Stereo

Podcasts are an important part of Scitech's digital offerings. Not only are they a way to make STEM engagement opportunities accessible, they are a flexible and adaptable form of communication allowing us to cater for different audiences and interests.

Scitech produced three podcasts series in the 22-23 financial year, *Audio Guide to the Galaxy, Please Look Up* and *Elements*. The latter two were produced for Particle, Scitech's digital science publication aimed at ages 15-25.

Audio Guide to the Galaxy was first launched in early 2020 in the midst of the COVID-19 lockdown. The podcast's aim was to emulate the experience visitors receive during a Scitech Planetarium show by guiding West Australians through the night sky from the comfort of their own backyard. The podcast's format was adapted in 2023 to utilise the pre-existing *Sky Tonight* blog on Scitech's website written by Planetarium Coordinator Leon Smith, who also now hosts *Audio Guide to the Galaxy*. Leon interviews a Planetarium presenter or special guest to inform listeners of what they can see in the night's sky each, as well as discussing other interesting space and astronomy news. An episode with Dr Robin Cook from the International Centre for Radio Astronomy Research (ICRAR) talked about the experience of witnessing the Ningaloo Total Solar Eclipse and received 2414 total listens, demonstrating that there is appetite in the community for this kind of digital STEM engagement.

Particle's *Please Look Up* podcast was launched in March 2023 and expands on the content from *Audio Guide to the Galaxy.* Each episode is around 10-15 minutes longer than an *Audio Guide to the Galaxy* episode, allowing for a more advanced and in-depth look at the month's space news, ideal for an older audience.

Particle also introduced a new format podcast in 2023 called *Elements.* A desire to elevate our podcast offerings and continue the storytelling theme inspired the new narrative journalism approach with this new series. The topic of 'elements' was chosen as a broad lens through which to investigate environmental issues specific to Western Australia, as these are highly important to Particle's target audience of 15-25-year-olds. Season one focused on the natural element of water with each of the five episodes telling a story on how water affects the people and land of Western Australia through a scientific lens. Following the success of this first season, production has started on season 2, focussing on the element of fire.

Scitech's third podcast *Wonder Kids* was originally published in 2020 and asked children to send in science questions which our Science Communicators answered in bite size episodes of around five minutes. Aimed at younger children, the podcast received 1,593 total listens this year, demonstrating the longevity and continual relevance of our podcast content.

Total podcast listens	**4,134**
Total podcast followers (on Spotify and Apple)	**370**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We Connect & Collaborate

The most effective way to engage all Western Australians in STEM is to partner and collaborate with other organisations and community groups that have a shared purpose and complementary capabilities.

By doing this, we expand our reach, bolster our advocacy, increase STEM literacy and participation, and maximise our impact in the community.

Events

Connecting and collaborating through Events

Events are an important part of what Scitech does as we can engage not only young kids but adults as well. Scitech is in a unique position to be able to offer its own events, as well as in partnership with other organisations presenting multiple opportunities for Scitech to engage the community with STEM.

Returning to a full calendar of events this year has seen the return of some popular offerings along with the introduction of new ones. There was a concentration of shows that cater for adults which enabled Scitech to attract new audiences and re-connect with visitors who may have not been to Scitech since they were younger.

Scitech has been participating in Fringe World Festival for the last eight years and this year experienced another success with the six *Dome Date* night events mostly sold out. After a three-year hiatus due to COVID-19, *After Dark* made a comeback and was well received with a sellout crowd. The older adult demographic for this event required a more complex science offering.

Scitech partners with organisations who have a shared purpose and complementary capabilities. Launched in March, WA STEM Connect was an opportunity to bring STEM organisations together to consider the STEM ecosystem as a whole.

Partnered Events

Astrofest

In collaboration with a festival committee, Scitech delivers Astrofest each November. This astronomy-themed festival brings together the science community, educators and the general public to celebrate and explore the night sky and universe.

As the largest astronomy and science festival in Perth, it attracts thousands of participants who are inspired by science shows, astrophotography, opportunities to talk to space researchers, astronomers and science communicators. Another highlight is the opportunity for participants to view the night sky through some of WA's biggest telescopes. Whilst the cloud cover wasn't ideal this year, the Astrofest, festival welcomed over 2,500 enthusiastic stargazers.

RoboCup Jnr WA

Scitech, in partnership with Rio Tinto and the RoboCup Junior WA committee, has been hosting the project-based robotics competition RoboCup Junior WA since 2013. This event targets Primary and Secondary students and provides a realistic link between classroom learning and real-world application of robotics and coding.

There are four challenges in the competition: an on-stage dance performance, soccer competitions, a rescue challenge and a maze. Students develop essential STEM skills that align with school curriculums, but also social, problem-solving and collaboration skills.

Impact

This event is particularly important for students to have a practical environment for applying 21st century skills such as communication, problem-solving and collaboration which form the basis for students to develop their thinking, social interactions and ways of working.

RoboCup Junior WA Student Results

"I've learned, um, to, like, collab-collaborate with other people, and all of the teams, I guess like the sportsmanship and teamwork around the area as well." [Social]

"We even made a group chat to talk to everyone to make sure we're all like doing the things. Make sure we are all practicing the dance and looking at the codes and fixing things." [Communication]

"I feel like this is a really good like learning experience for like teamwork and problem solving." [Teambuilding]

"So we did a lot of ... learning [about] the ... system, the Minestorm coding system, which was fun because I never knew really how to do that before." [Technology Skills]

"That's mostly all we did [this morning], there was a lot of coding involved though, just redoing that, testing it like 15 different versions of code." [Problem-solving]

(Source: Semi-structured interviews with students competing at RoboCup Junior 2022)

General Public Activations

Statewide delivers engaging and fun science shows and activations throughout the year at general public events, introducing and furthering STEM interest to new audiences. Scitech's activations are tailored to each event, and include a selection of interactive STEM exhibits, facilitator-led activities, maths puzzles and lawn games, as well as interactive science demonstrations and stage shows. These experiences provide children and adults a chance to play, learn and connect with each other through STEM.

At the 2022 Perth Royal Show, Scitech engaged more than 16,000 people across the 8-day event, while Scitech's activation at the heavily rain-affected WA Day Festival engaged 4,600 people, despite the second day of the festival being cancelled. New branding material was introduced at the WA Day Festival this year, ensuring a uniform aesthetic to the activation, and elevating the visual appeal and participant experience.

Other public activations include a pop-up family science zone at the Perth Concert Hall for the West Australian Symphony Orchestra (WASO)'s performance of Nature's Symphony, the City of Belmont KidzFest and the City of Kalgoorlie-Boulder Kids Fest.

Reach

General public outreach events enable Scitech to have valuable extra opportunities to reach sections of the community on a large scale, including those who often have not been introduced or interested in STEM prior to interacting with Scitech.

General Public outreach activities engaged

51,075

people


scitech
MIPRO
BOC


CATERPILLAR
DEFENCE

Resources Technology Showcase

Held every two years, Seven West Media's Resources Technology Showcase (RTS) is an expo and conference held across three days that features innovations and technological breakthroughs in the mining, resources, defence and space industries. It presents an opportunity for Scitech to directly engage with school groups and the general public with a focus on STEM careers and how technology and innovation are influencing our future.

Scitech's dedicated interactive booth was a popular stop for visitors, including Prime Minister Anthony Albanese stopping to watch a liquid nitrogen smoke fog bomb as part of a science demonstration. We also welcomed then WA Premier Mark McGowan.

On-going developments in the resources industry mean we will continue to see increased demand for students' STEM qualifications and skills, skills which are essential for developing the next generation of innovators. Scitech prioritises events like this so that we can maximise the impact at those critical points of career-making decisions.

Reach

RTS is an opportunity for Scitech to make the connection between developing the right skill set and knowledge in science, technology, engineering and mathematics with the real-world application of these skills.

RTS Attendance

14,563

Case Study

Scitech After Dark

Scitech events provide the organisation with an opportunity to engage people who are less likely to visit the Scitech Discovery Centre during normal hours of operation.

After Dark is an evening event for 18+, allowing adults to explore our exhibits, see Science and Planetarium shows and take part in pop-up activities. After not being able to run since 2019 due to COVID-19, the event returned on April 15. All 700 tickets to the event sold out within a month of being available, showing the strong interest and enthusiasm for engaging STEM events among adult audiences.

The event included an adult adapted version of our Science Theatre show *Things That Glow*, a Planetarium show, giant blue blocks building activity and silent disco featuring science themed songs, alongside the exhibits in Scitech's main gallery and feature exhibition *Astronaut*.

Particle, Scitech's digital science publication aimed at a young adult audience, was also part of the event for the first time, facilitating two digital quizzes which proved to be a popular addition. With the event and *Particle* publication sharing a similar audience and tone, engaging content found through it's website provided the perfect vehicle to cross promote and give attendees an extension to their visit.

Audience feedback indicated that even more in-depth science explanations would be welcome in the science presentations at future *After Dark* events, showing that Scitech can fulfill a need for adult STEM learning experiences in the community. The success of the *After Dark* event demonstrates how our exhibits and shows appeal to a range of audiences and can be utilised to fulfill the needs of STEM engagement for multiple areas of the community.

Event met or exceeded expectations	**92%**
Had not visited Scitech before	**17%**
Had not attended a Scitech 18+ event before	**66%**

(Source: After Dark Post-event Survey)

Partnerships

Government Partners

Government of **Western Australia**
Department of **Jobs, Tourism, Science and Innovation**

An Australian Government Initiative

Inspiring Australia

Corporate Partners

Alcoa

BDO

the human energy company™ Chevron

MITSUI IRON ORE DEVELOPMENT

RioTinto

Woodside Energy

Community Partners

Albany Shellfish Hatchery
Amphire Catering
Astronomy WA
Astrotourism WA
Australia in Space
Australian Research Council Centre of Excellence for the Digital Child
Australian Society for Medical Research
Autism Association of WA
Bamford Consulting Ecologists
BINAR
Catholic Education WA
Celebrate WA
ChemCentre
Committee for Economic Development of Australia
Curtin University
CyberWest
Department of Fire and Emergency Services
Department of Water and Environmental Regulation
E2 Young Engineers
Edith Cowan University
Everett Consulting
Fringe World Festival
Great Southern Science Council
Harvest Road
International Centre for Radio Astronomy Research
Makers Empire
Museum of the Great Southern
National Science Week Co-ordinating Committee
Nexperium
North Metro Tafe
Pollinators
Radlink Communications
Robocup Junior WA
Roebuck Bay Working Group
Royal Agricultural Society of Western Australia
Science Centre Singapore
Science Teachers Association of WA
Seven West Media
South West Science Council
Stan Perron Charitable Foundation
Student Edge
Telethon Kids Institute
Rural Clinical School of Western Australia
The University of Western Australia
WA Apiarists' Society
Museum of the Goldfields
Western Australian Organic and Isotope Geochemistry Centre
WA Police
WA Return Recycle Renew
WA School of Mines
WA Data Science Innovation Hub
Water Corporation
Western Australia Symphony Orchestra
Marine Energy Research Australia

We Grow

If we are to engage Western Australians to develop more STEM literacy and understand and embrace the benefits of STEM learning and skills, then we must lead change from the inside.

We continue to invite and participate strongly in research to further advance STEM education in Western Australia and support the WA government's STEM Strategy.

As an organisation, we embed diversity, inclusion and sustainability initiatives into our work and culture, so we can inspire, evolve and deliver both environmental and social impact both internally and externally.

Research

Exhibit Co-Development

Scitech partners with the Australian Research Council Centre of Excellence for the Digital Child (ARC CoE), which is research how children learn, develop, and connect in a rapidly changing digital world.

As part of the Digital Child project, we worked with digital education experts to create the *Move It!* Exhibit which has been on the floor at the Scitech Discovery Centre since 2022. This exhibit is a full-body experience which challenges users to program a mouse so it can reach the cheese, helping to develop creativity, computational thinking and basic coding skills. Support from the research teams and experts means that we can continue to make improvements to the exhibit by incorporating their insights and observations.

The research found that the *Move It!* exhibit did encourage computational thinking at different stages of cognitive development. This was evident particularly with children aged seven and up who appeared to employ more purposeful and measured thinking associated with cause and effect, breaking the task into parts, following software instructions and planned activation.

This project has provided the foundations on how Scitech can adapt research evaluation into the design of innovative exhibits and programs, in particular using "The A to E of Creativity framework for Young Children's Creativity" by Professor Karen Murcia and colleagues.

Digital Creativity

In Term 3 and 4 2022, Scitech participated in the ARC CoE research project *Fostering children's creativity with STEM activities in online learning environments*. The aim of this project was to observe the ways children demonstrate creativity while engaging in Scitech's STEM activities in online learning environments.

Scitech co-designed a series of hands-on workshops with a regional school and the research team to be delivered remotely. The workshops were aligned with the school curriculum and culminated in the students using noisemakers created during one workshop as part of an interactive puppet show. The show and workshops were digitally delivered in real-time from Perth to their school located more than 700km away. The creation of these experiences allowed the researcher to compare the creativity displayed during the online sessions to the creativity displayed when the Scitech Statewide team delivered in-person programs.

As puppet shows are experiences that we currently only offer to visitors to the Scitech Discovery Centre, it also presented an opportunity for us to trial digital delivery as a way of providing these experiences to schools and communities who can't visit in-person.

A Creative Study

Also with the ARC CoE, the first phase of a study to explore young children's expressions of creativity while using digital technologies begun in early 2023.

The Creative Cove Study recruited a cohort of 6 children aged 5 – 6 years from the Scitech membership database. In hourly sessions, the children were introduced to a new digital technology device and given an open-ended challenge chosen by the early childhood researchers for their educational qualities. These observations occurred each week for a period of ten weeks in the Scitech Lab, with parents and caregivers also encouraged to stay and observe how their children approached the tasks.

Early childhood educators and researchers from the Curtin School of Education facilitated the learning experience, modelling behaviour for parents to showcase best practice. All sessions were video and audio-recorded, and research debriefs were conducted each week to reflect on methodology, key insights and opportunities for continuous improvement.

The findings from this first stage are currently being analysed by the ARC CoE Digital Child researchers, with aims for publications in scholarly literature and best-practice resources for early-childhood educators.

The collaboration with ARC CoE embodies innovation, creativity, and a steadfast commitment to empowering the next generation with skills in a digital age and provides a strong foundation for Scitech to continue to explore opportunities to engage with our audiences.

Research Collaboration

Scitech currently uses a range of evaluation tools to measure the short and medium-term outcomes of our programs and experiences. These predicted outcomes are determined based on where the various programs and experience fit into Scitech's Theory of Change. Whilst Scitech has been able to demonstrate the short-term outcomes of activities and programs and some medium-term outcomes, demonstrating longer-term outcomes has been a challenge.

To gain a better understanding of the longer-term impact of STEM learning in the WA community, Scitech has begun a research collaboration with the University of Western Australia, working with Dr Heather Bray, Senior Lecturer and Coordinator of the Master of Science Communication.

Since Scitech is a science engagement organisation, conducting this study with science communication researchers aligns more closely with our operations and will likely reveal findings that will be relevant to a wider field of science communication.

Using science capital as a theoretical framework, the research will focus on the broad question of: How does Scitech contribute to engagement with STEM in the medium to long term? Science capital was chosen since it is a framework that Scitech already uses to measure short-term impact and was developed as a way of predicting science identity (which is strongly aligned with attitudes towards science, likelihood of science study and understanding the relevance of science in society).

The research will take place in several stages over the next few years,. Launching with the Pilot study in the 23-24 financial year, it is hoped that future research projects will be adapted based on the learnings and results from the Pilot study.

Organisation Change

Access and Inclusion

A cross-functional working group was formed to tackle how to improve the Scitech experience for those with mobility issues, sensory impairment and visitors who are neurodiverse. It is important to Scitech to ensure that visitors regardless of their disability, background or needs have access to learning opportunities and feel welcomed in Scitech's spaces.

STEM pathways and education are constantly challenged by underrepresentation, lack of diversity, unhelpful stereotypes and inequality. This financial year saw improvements to the Chevron Science Theatre wheelchair access, as well as diversity and inclusion training for all staff. Delivery teams also commenced the planning for regular future events tailored to neurodiverse visitors, tactile events for visitors with sight impairment, and events tailored to the deaf.

Reducing financial barriers was also a priority so visitors without the financial means to attend Scitech are given opportunities to engage in STEM learning. A number of initiatives are in place with this in mind such as the School Access Program, which provides disadvantaged schools with free entry and sponsorship of transport. This financial year we had nine primary schools come to Scitech via this program, a total of 552 students and 135 teachers and caregivers.

Scitech also works with charities to provide free entry to families who cannot afford the cost of admission. This financial year Scitech partnered with the Smith Family Foundation and Transperth to offer families free entry to the Scitech Discovery Centre as well as free travel on the day. Two thousand families were invited across two days in December.

Reconciliation Action Plan

Scitech embarked on creating its first Reconciliation Action Plan in early 2023. A working group of staff from across the organisation was formed, along with guidance from an external Aboriginal advisor to ensure Scitech's reconciliation journey would meet the development, responsibilities, implementation and reporting phases required.

The aim of our first Reflect RAP is to embrace and acknowledge Aboriginal and Torres Strait Islander peoples as the first STEM practitioners and value their innovation, knowledge, culture and history. We want to build the foundations for a future that gives Scitech practical plans for action that will:

- Increase cultural knowledge for Scitech staff
- Foster relationships, collaboration and opportunities for and with Aboriginal and Torres Strait Islander peoples
- Value and respect the history, culture and contributions of Aboriginal and Torres Strait Islander peoples as our first STEM practitioners
- Use our sphere of influence to promote reconciliation and inclusion.

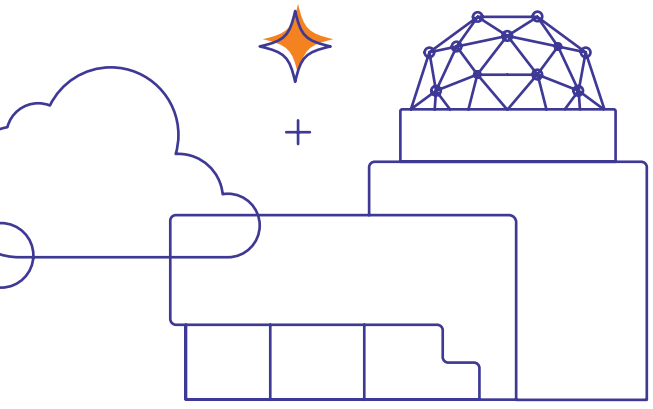
What has been clear throughout the process so far, is wanting to produce a RAP that was well-informed, and a committed and genuine attempt for Scitech to enact meaningful change.

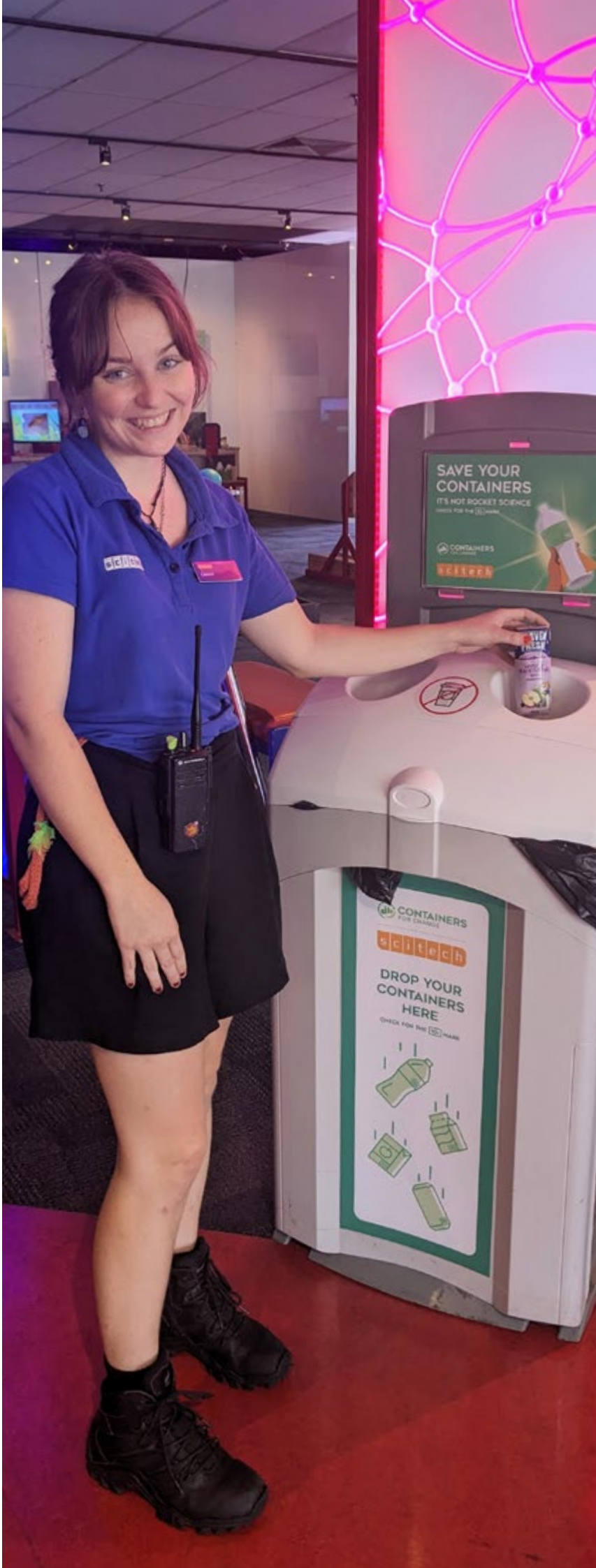
Making Scitech more sustainable

Since its formation in March of this year, a cross-functional Sustainability Group has been working hard to assess our current sustainability position and identify key areas for improvement. This initiative has been enthusiastically embraced.

Waste management has been identified as one priority and a full audit allows us to create a long-term, ecologically sound solution to the waste that Scitech generates.

An example includes partnering with an external provider to repurpose old Scitech uniforms into hats and tote bags.





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