



Australian Government
Chief Scientist

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From the wireless to the web

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Online address

Imagine it's March 1942.

It's the depths of the Second World War and you're a teacher at the Mount Hawthorn Kindergarten School in the inner suburbs of Perth.

These are anxious times. The nation is reeling from news that the war has come to Australia.

The skies above Darwin have been darkened by the bombs of Japanese forces, claiming the lives of more than 200 people.ⁱ

An invasion feels more like a probability than a possibility.

Days earlier, the war has come to your doorstep with Japanese fighter planes attacking the Western Australian coastal town of Broome.ⁱⁱ

In response, the Government has ordered the closure of all kindergartens in Perth and Fremantle.ⁱⁱⁱ

A meeting of the Kindergarten Union is called. You and your fellow teachers gather in a cramped room.

The topic on the agenda? In such extraordinary times, how can children continue learning when they need to be kept at home?

After hours of intense discussion and debate, a new and innovative method of reaching out to young children is proposed.

An educational radio program for the children of Western Australia will be developed.

It's also announced that auditions will be held for the position of host.

A few days later you're sitting in a room at the ABC studios in Perth, awaiting your audition.

You're nervous and you should be. Today is a big day.

They call you in.

You try to keep your expression calm and your voice reassuring. Just like in the classroom.

When the audition ends, you feel a ripple of excitement permeate the room.

“You’re a complete natural,” you’re told.^{iv} The job is yours.

On 23 March 1942, Margaret Graham, a gentle woman with a love of children and a talent for handicrafts,^v began ‘Kindergarten of the Air’, the first program of its kind in the world.

Every day, at 9:30 am, parents were advised to clear a good sized space in front of the wireless and help their children with activities as directed by their unseen teacher.^{vi}

Stories, songs, physical exercises, and suggestions to parents filled the 20 minute programming.^{vii}

The program’s popularity led to it being delivered nationally in 1943, and later emulated in the United Kingdom, Canada, and the United States.^{viii}

It would also inspire the creation of ‘School of the Air’, a service that, to this day, delivers primary and secondary lessons to children in isolated Australian communities.

Today, we again find ourselves in a moment of great challenge; a moment that is re-shaping the way we live, the way we work, and the way we teach and learn.

And yet, it’s important to recognise that this situation is not somehow unique or hopeless.

The story of ‘Kindergarten of the Air’ reminds us of the incredible drive and ingenuity of this nation.

What was true then can also be true now.

We can make change work for us and turn a moment of adversity into an opportunity.

Learning from the lessons of the past to reach beyond standard approaches and promote new strategies, new techniques, and new technologies.

From the radio age to the internet age.

From the wireless to the web.

Online learning can be your own instrument of communication to the homes of students and parents during this challenging time.

Harnessing its power to deliver integrated STEM education programs and help children learn and grow outside the classroom.

Echoing its pioneering past, the ABC is once again broadcasting educational shows, offering 4000 free videos, interactive resources and games mapped to the Australian curriculum through its education portal.

The online SPECTRA program is on hand to encourage and excite students to do science activities, experiments and projects, all of which are developed and administered by the Australian Science Teachers Association.

And, let's not forget a resource that lies very close to my heart.

When I commenced my term as Australia's Chief Scientist, I did so with a vision to expand educational opportunities and outcomes for all our children.

Central to that goal is promoting clear, simple, and consistent advice to students and parents about the value of studying fundamental STEM subjects.

Ensuring our children have the tools and guidance that they need to explore and discover, while building a solid foundation for their, and our nation's, future.

But what would be the most effective way to do so?

On my first day in the job, I was handed a thick book. It was called the STEM Program Index, or SPI Guide, and it was a list of extracurricular programs available to students through third party providers, such as private firms, non-profit organisations, and universities.

It was a good idea but, being a printed book, the medium limited the message.

It was time-consuming to search and, of course, it was out of date even before we hit print. And it would be very expensive to hit print again.

The solution was obvious: an online portal. It would turn a temporary one-time compilation into a living two-way link.

We gave it a name: The STARportal.

Why? Because Stargate was taken and I liked the cadence of STARportal.

Australia's first national portal for STEM activities.

A searchable database that connects parents, students and teachers with local and online STEM activities in real time.

Giving young people the opportunity to solve real world problems, using well-developed, high-quality, tested activities.

A world of inspiration right there at your fingertips.

But, all of these virtual tools of education matter very little without the driving force of human imagination, initiative, and devotion.

Leading the great task of turning ideas into actions.

Of nurturing the next generation.

Embedding a love of learning and opening their minds to tomorrow's possibilities.

I look at you not just as leaders in the classroom, but leaders in the community as well.

Our challenge may be new. The technology with which we meet it may be new.

But what this moment calls for is recalling the enduring lesson of our history.

Invoking the spirit of the educators of the past, like Margaret Graham.

To show the world, once more, just how resilient and resourceful Australian teachers can be.

May the force be with you.

Thank you.

ⁱ <https://www.awm.gov.au/articles/blog/1942-bombing-of-darwin>

ⁱⁱ <https://www.awm.gov.au/visit/exhibitions/alliesinadversity/japanese/broome>

ⁱⁱⁱ 'Kindergartens Closed' (March 5, 1942). *The West Australian* (Perth, WA : 1879 - 1954), p. 3. from <http://nla.gov.au/nla.news-article47183411>

^{iv} <http://adb.anu.edu.au/biography/graham-margaret-10339>

^v <http://adb.anu.edu.au/biography/graham-margaret-10339>

^{vi} Griffen-Foley, B. (2020). 'Let's join in': children and ABC Radio. *Historical Journal of Film, Radio and Television*, 40(1), 185-209.

^{vii} 'Kindergarten Gain From Public Interest' (December 18, 1942). *The Courier-Mail* (Brisbane, Qld. : 1933 - 1954), p. 5. from <http://nla.gov.au/nla.news-article50138200>

^{viii} 'Australia Showed The Way With Kindergarten Of The Air' (January 28, 1950). *Smith's Weekly* (Sydney, NSW : 1919 - 1950), p. 4. from <http://nla.gov.au/nla.news-article235987278>