

Thinking big with science play to help primary students build skills for their future

Why Yarra Science Play?

As technology transforms the way we live, work and play, it is more important than ever to help students develop skills for the future workplace. We know that 40% of today's jobs will be affected by automation in the next 10-15 years. Future careers will rely heavily on STEM literacy (science, technology, engineering and mathematics) and 21st century skills such as critical thinking, creativity, collaboration and problem-solving.

Unfortunately, many children in our most vulnerable communities have no access to digital learning or smart technologies. This digital divide has a huge impact on their long-term educational, social and economic outcomes. Data shows us that embedding STEM activities and innovation within the school environment can enrich the curricula and provide learning opportunities to help all students thrive now and into the digital future.

Our approach

We partnered with industry, Yarra After School Care and Richmond West Primary School to pilot an informal STEM program developed by Yarra CityLab. Yarra Science Play was designed to support equitable access to smart technology while sparking interest in science through play. The free program provided the school with Internet of Things (IoT) XKits, visualisation tools, teaching and marketing material and online support.

Yarra Science Play was facilitated by a parent volunteer in the after-school club during Semester 2, 2019. In each session, students conducted interactive experiments with the XKits to measure temperature, pressure, acceleration and light. Data was viewed on screens to inform discussions to help enhance STEM comprehension. Following the pilot's success, Yarra Science Play will be rolled out to other local primary schools and included in the Yarra Libraries after school and holiday programs.

Pilot snapshot

25	Free development kits (XKits) supplied	12	40 minute 'learning through play' sessions	50%	Split between females and males
3	Free data visualisation tools supplied	15	Participants in each session	11	Average age of the participants





This is a smart partnership project involving

- Advocacy and Engagement
- Children's Services
- Richmond West Primary School (external partner)
- Thinextra (external partner)
- Yarra CityLab

Connect with us

Please contact us to learn more about this project and others like it. We look forward to connecting with you as we progress Yarra Council's Smart City Approach.

Megan Turnley

Strategy and Transformation Lead
Yarra CityLab

M 0438 790 396

E info@yarracity.vic.gov.au

Yarra City Council

PO Box 168

Richmond

VIC 3121

T 9205 5555

info@yarracity.vic.gov.au

yarracity.vic.gov.au

Interpreter Services

(03) 9280 1940

National Relay Service

TTY 133 677 then

(03) 9205 5555