The Beacon Program



BeaCon
BY BAE SYSTEMS & LUMINATION

- 3 year partnership with BAE Systems Australia (from 2022)
- ‘Our Future World’ theme
- Years 4-6
- Free 10 Week Program in schools, and 4-day Holiday Program
- UN’s Sustainable Development Goals
- Students solve real world problems around sustainability using emerging technologies

10 Week Program 2024

7 Schools participated in Term 2

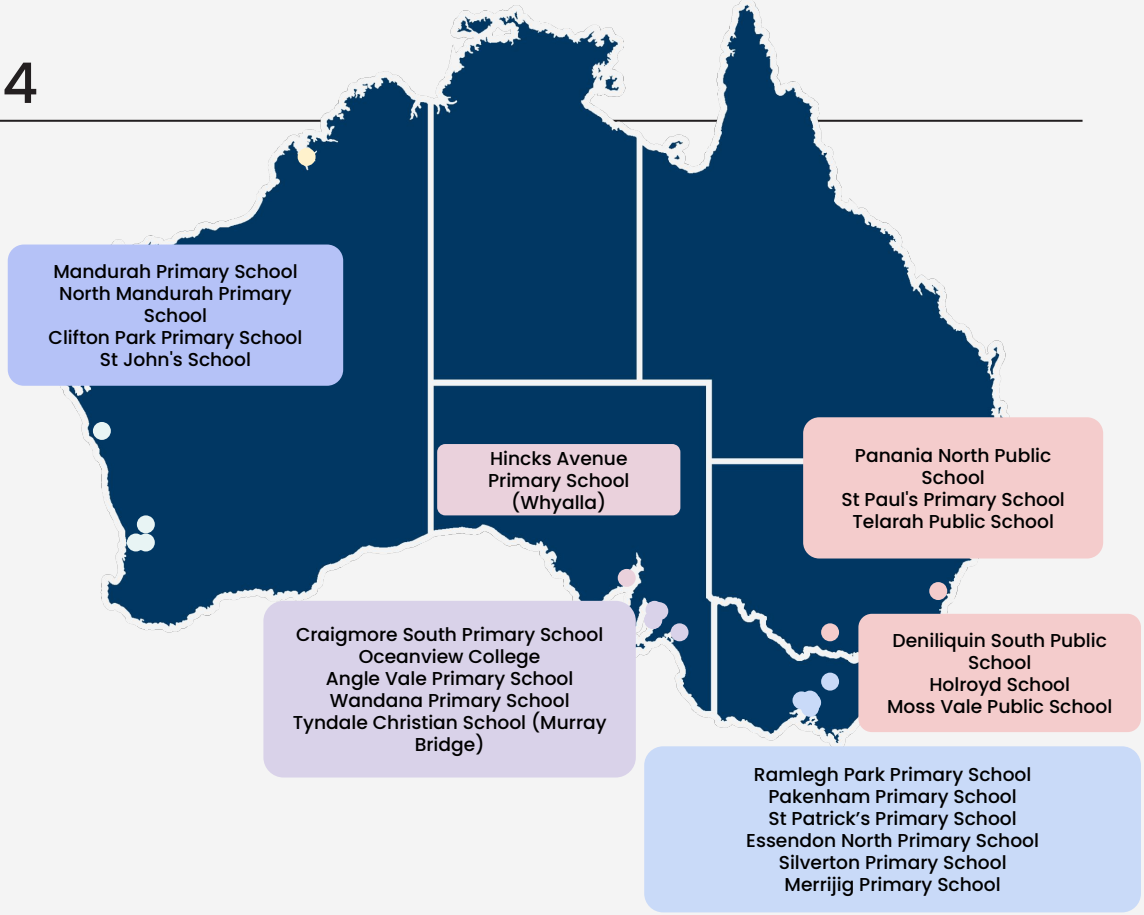
949 students, 18 teachers

8 Schools currently running the program in Term 3

400 students, 12 teachers

7 Schools confirmed for Term 4 participation

Wait list with over 40 schools for 2025



Which quickly grew

In less than two years, we've achieved national coverage, high diversity and promising STEM subject and career intentions

2000

Low socioeconomic kids reached

60%

Female participation

80%

STEM career aspirations post-program

10%

First Nations participation



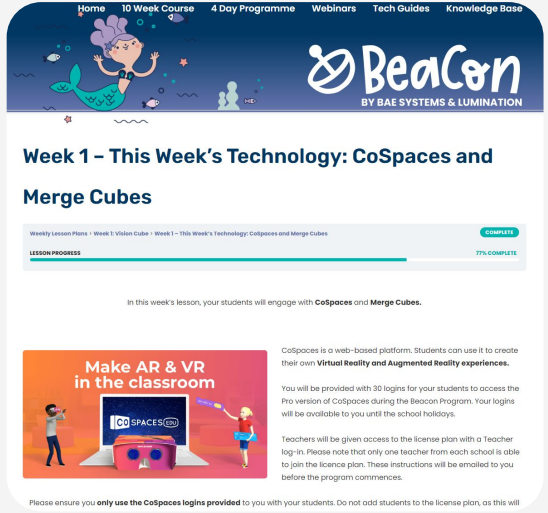
10 Week Program Content and Support

The Beacon 10 Week Program is delivered by teachers to their own students within their schools across Australia. Teachers are provided with 10 lesson plans and supporting teaching materials for the term. Each lesson can go from 60-90 minutes.

To support our teachers, they are given access to the Beacon LMS (Learning Management System) which includes the following to empower teachers delivering the program:

- Videos introducing the student tasks
- Tutorials on how to use the technologies
- Lesson Plans for each week of the program
- Teacher presentations for each lesson
- Tips and Tricks

An optional weekly online webinar is offered to teachers, where a member of the Beacon team is online to offer specific support in delivering the program with their students.





10 Week Program - Technology Kits





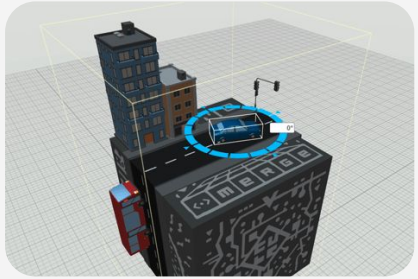


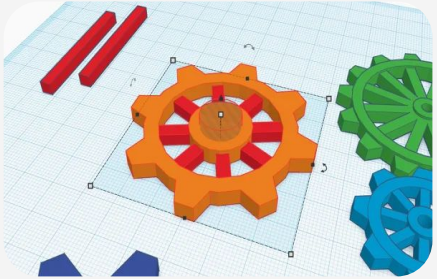


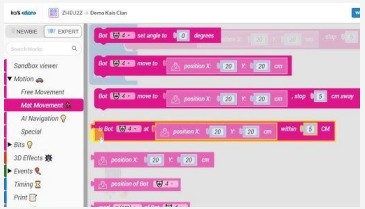
Each participating school receives a technology kit with the following:

- Mobile Devices
- Handheld Virtual Reality Headsets
- Merge Cubes
- Kai's Clan Robotics Starter Pack (4 robots & Smart City Mat)
- Charging hub and cords

10 Week Program - Software









- **CoSpaces Edu**
  - Online VR/AR Creation Tool
  - Coding
  - Each teacher receives free access to CoSpaces Pro for the term
  - 30 student log-ins provided
- **Tinkercad**
  - Online 3D Modelling Tool
  - Designs can be imported into their CoSpaces creations
- **Kai's Clan Robotics**
  - Coding
  - Coordinates
  - Angles

10 Week Program Outline

Weeks 1-5: Learning about Sustainable Development Goals, developing digital skills (VR/AR design, coding, 3D modelling)

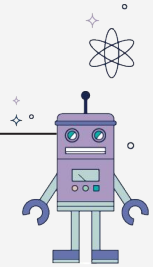
Weeks 6-10: Designing a Sustainable City using CoSpaces to demonstrate their learning from Weeks 1-5

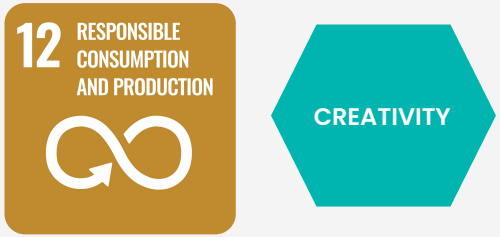
Showcase and Celebration





Lesson 2: The Want Mountain









Introduction

- SDG Focus: #13 Responsible Consumption and Production
- Soft Skills Focus: Creativity

Exploration using emerging technologies

- Watch a handheld virtual reality video about the topic to empathise with the issue.

Content Creation

- Use CoSpaces to create a 'Want Mountain' to illustrate the issue of over-consumption in our world. Incorporate coding into their design.

Viewing in VR & AR / Reflection

- Students view their Want Mountain in VR or AR and complete reflection questions.

Station-based Learning

Student Survey Results Term 2 2024

What impact did the program have on students?

Mathematics

14.74% increase

in students identifying Mathematics as their favourite subject

Future Thinking

6% increase

in students knowing which career they wish to pursue

STEM Careers

28.57% increase

in students identifying STEM career aspirations

Engineering and Game Design were the most common STEM careers identified

Teacher Survey Results Term 2 2024

What impact did the program have on teachers?

Confidence in Teaching with Emerging Technologies

Average confidence level before Beacon: **6.5 / 10**

Average confidence level after Beacon: **9.3 / 10**

43.08% increase

Student Outcomes

100% of teachers identified noticing an improvement in student outcomes

Student Performance

Average for all subjects before Beacon: **6.3/10**

Average for all subjects after Beacon: **8/10**

26.98% increase