Victorian Academy
of Teaching and Leadership

R.E.A.L Robotics Program

Sunbury Schools

"Engaging students in stimulating learning via robotics and design thinking"

Victorian Academy of Teaching and Leadership

Sunbury School Network
R.E.A.L Robotics Program

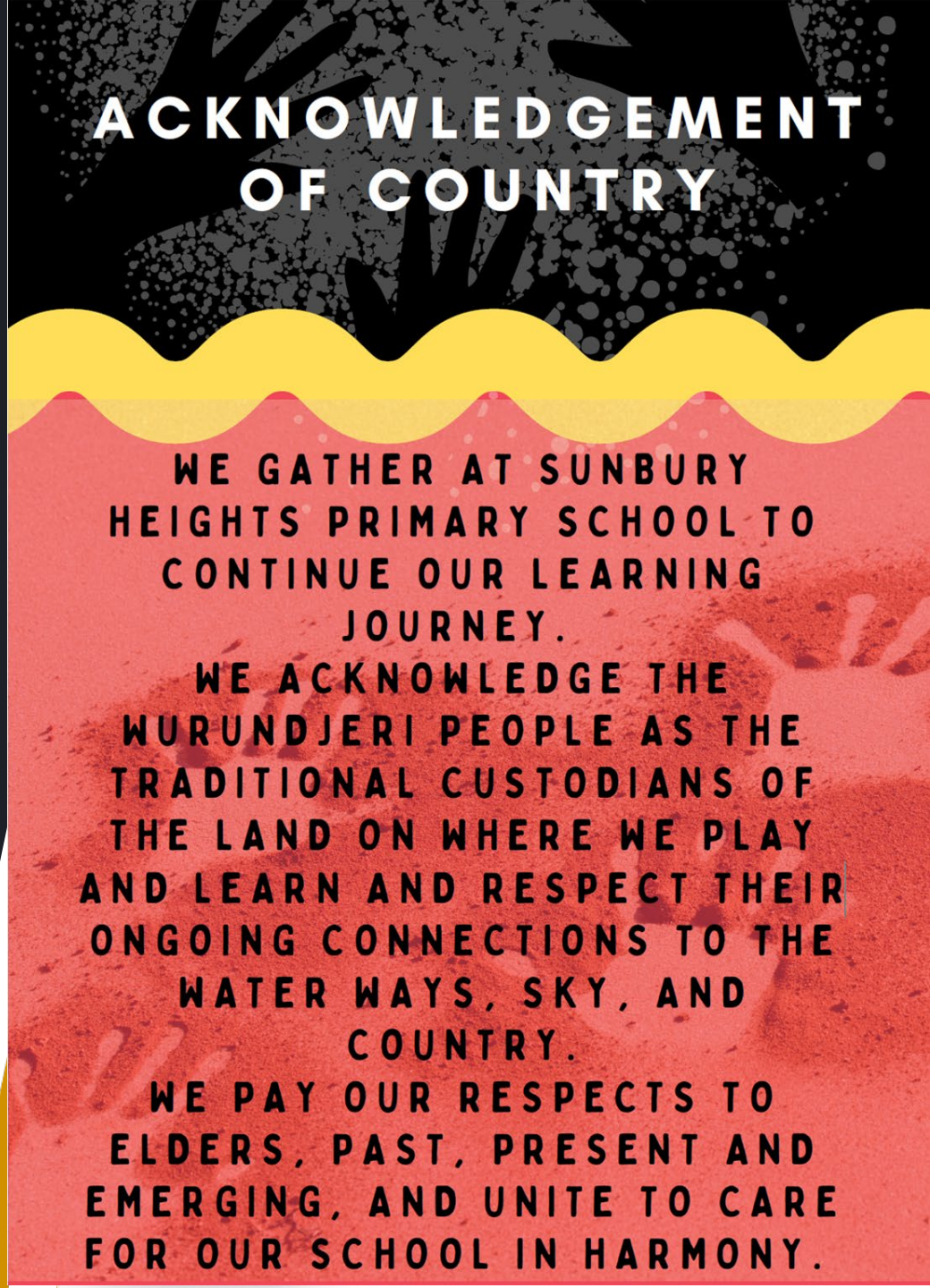
Laban Toose

Principal Sunbury Heights PS

First Lego League Tournament Director

Victorian Academy of Teaching and Leadership

R.E.A.L Robotics Program



R.E.A.L Robotics Program

Learning Intention

> To develop an understanding of the R.E.A.L Robotics Program and how it can enhance school networks.

Success Criteria

> I can identify the key features of the R.E.A.L Robotics program.

> I know how the program can enhance a school network.

> I know how the program supports and enhances school transition.

R.E.A.L Robotics Program

What is R.E.A.L Robotics

- **R**obotics
- **E**nhanced
- **A**pplied
- **L**earning

FIRST LEGO LEAGUE

SUNBURY HEIGHTS PRIMARY SCHOOL 5197

LEGO education SPIKE™

R.E.A.L Robotics Program

Program aims

- An opportunity for students to experience the benefits of teamwork and collaboration.
- Development of research and design technology skills
- An alternative to our network school's summer & winter sports program.
- An opportunity for a STEAM CoP for educators.
- An opportunity to strengthen 6-7 transition program with local Secondary Schools.

FIRST LEGO LEAGUE

SUNBURY HEIGHTS PRIMARY SCHOOL 5197

LEGO education SPIKE™

R.E.A.L Robotics Program

Program History

- **2016** – Wyndham Park Primary School entered First Lego League Competition.
- **2017 – 2022** – Wyndham Schools R.E.A.L Robotics Program.
  - 10 schools participating in 2017.
  - 17 schools in 2022 (22 teams entered in competition).
  - Now facilitated by Wyndham Tech School.
- **2023 – 2024** – Sunbury Schools R.E.A.L Robotics Program.
  - 10 schools participating including 2 secondary Colleges.

FIRST LEGO LEAGUE

SUNBURY HEIGHTS PRIMARY SCHOOL 5197

LEGO education SPIKE

R.E.A.L Robotics Program

What we do

- 4-day program across the school year (1 day per term).
- Teams of 10 students & a coach (teacher) from each school.
  - Build and program a Spike Prime Lego Robot.
  - Complete 2 research projects.
  - Team Building activities - team name
  - Participate in the **First Lego League Robotics Competition.**

FIRST LEGO LEAGUE

SUNBURY HEIGHTS PRIMARY SCHOOL 5197

LEGO education SPIKE™

Circle Clap

R.E.A.L Robotics Program

First Australia - First Lego League

- First Australia https://www.firstaustralia.org/first-lego-league
  - 3 program streams – Discover, Explore & **Challenge**
  - Annual Competition – August – November
    - New theme every year – 2024 = Submerged
      - **Robot Game** - missions
      - **Research Project** – Presentation to judging panel
      - **Robot Design** – Discussion with Referees
      - **Core Values** – Demonstrated throughout competition

R.E.A.L Robotics Program

First Lego League – Robot Game

FIRST® LEGO® LEAGUE

SUNBURY HEIGHTS PRIMARY SCHOOL 5197

SUBMERGED℠

LEGO education SPIKE™

What are the benefits of this program in our school networks?

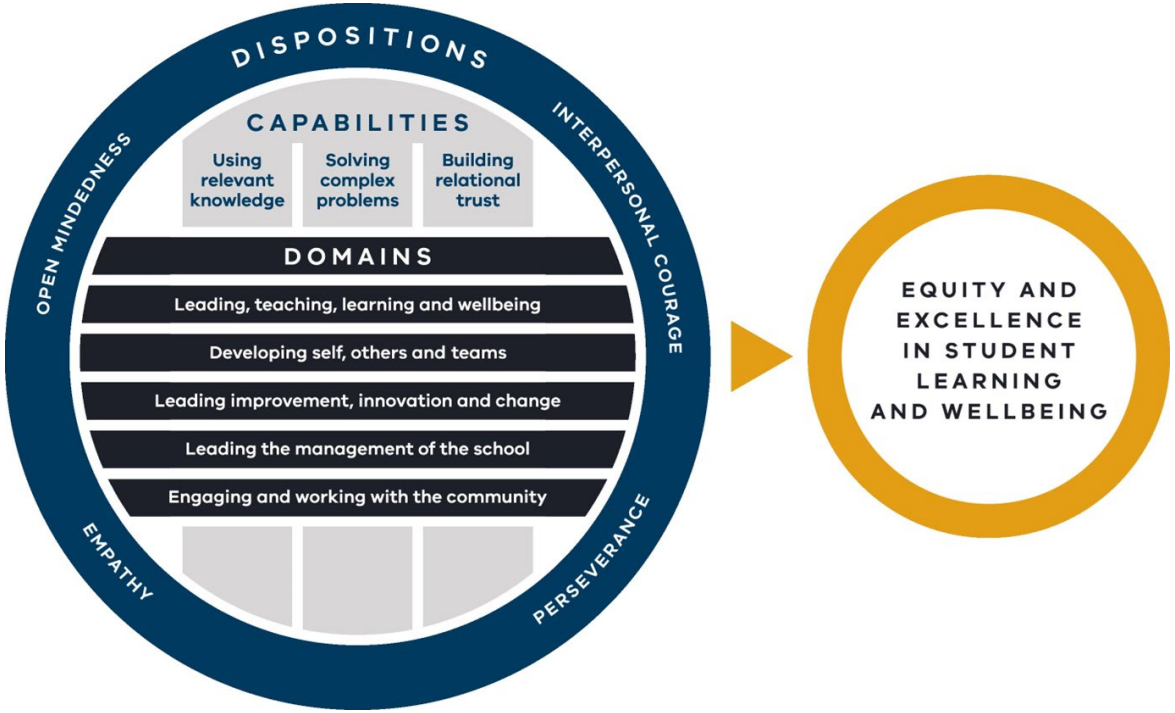
- Simplicity of the program
- Enhances collaboration
- Resource sharing
- Local CoP for STEAM teachers
- An opportunity for enhancing 6-7 transition

Questions only

What have been the benefits for school leaders?

- Access to additional funding via Schools Plus
  - Covers TiL
  - Covers Professional learning costs
  - Covers resources
  - Covers Competition Entry

- Partnership with Business - Salesforce
  - Volunteer workforce
  - Expanding partnership opportunities



R.E.A.L Robotics Program

Funding Source

- https://www.schoolsplus.org.au/
  - Applications open annually from August – September.
  - ICSEA value 1000 or below.
  - Partnership with a business.
  - Coach & Knowledge Sharing Hub.

Schools Plus

FIRST LEGO LEAGUE

SUNBURY HEIGHTS PRIMARY SCHOOL 5197

LEGO education SPIKE™

R.E.A.L Robotics Program

Program Partner

- Salesforce https://www.salesforce.com/au/
  - Donated funding.
  - Volunteers for the program.
  - Opportunity for future programs – buddies, careers.

R.E.A.L Robotics Program

Other considerations

- Venue
- Training (PL for coaches)
- Time for program
  - (1 hour per week and 1 day per term)
- Robotics Table
- Spike Prime kit
- Practice Kits