QUAKERS HILL PUBLIC SCHOOL

JOURNEY SUMMARY
Using robotics and coding to develop a systematic approach to the explicit instruction of future-focused competencies, such as communication, collaboration and critical thinking.

JOURNEY FOCUS AREAS
Student achievement in robotics and coding

TIMELINE AND MILESTONES

2012-2014
- Classrooms were transformed to create adaptive, flexible learning spaces through the use of furniture and interior design.
- Professional learning on how to best utilise the new spaces.

2015
- Additional classrooms transformed.
- Future-focused pedagogy embedded in teacher practice, irrespective of room design.
- Research commenced to inform resourcing.
- Resources purchased - drones, Spheros, LittleBits, Lego WeDos and Lego Mindstorms.
- Teachers provided time to explore new technology.
- Intel Galileo projects displayed at Vivid light festival.
- STEAM units developed for all stages.

2016
- Professional learning around new technologies and "unplugged" strategies.
- Websites, software and applications to support coding and robotics instruction.
- Digital technologies scope and sequence developed.
- Supportive professional learning provided.

2017-18
- Collaboration with Blacktown Learning Community support network schools.
- Professional learning refresher for all staff.
- Induction process for new teachers on future-focused pedagogies.
- Microsoft 21st Century Learning Design training.
- Coding demonstration lessons and team-teaching opportunities provided by Instructional Leaders.

POSITIVE IMPACT AND EMOTIONS

New focus on preparing students for future workplaces
- Greater collegial sharing of resources and more importantly, teaching strategies
- Improved understanding of the new science syllabus
- Better staff relationships and respect for colleagues
- Challenging, but fun and necessary

Improved student engagement
- Improved academic results in all areas
- Collaborative
- Exciting
- Supportive/supported

Greater collaboration of teachers in planning for teaching

MAIN CHALLENGE & SOLUTION
Challenge: Challenging established pedagogy and structures.
Solution: By creating a supportive environment that encouraged teachers to try- and fall-in using the new technology. Providing significant and ongoing professional learning. Providing support structures. Prioritising the project, budgeting and researching carefully to get the best resources to support the initiative.