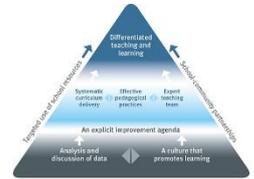


BE A STEM LEADER

Invest in student, staff and school improvement



CODE BREAKER – YEARS 5-6

[Register Here](#)

✓ Differentiate teaching and learning

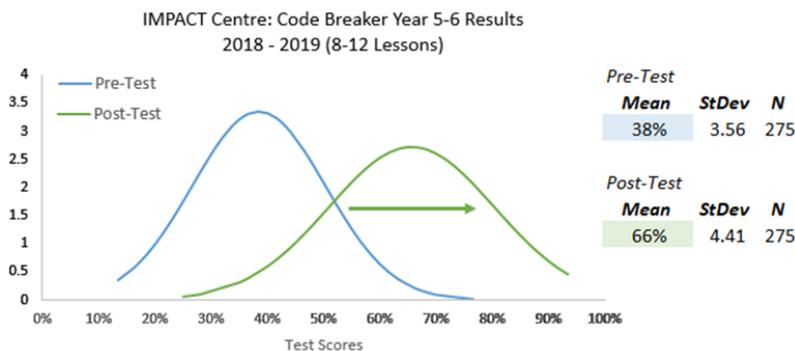
Code Breaker develops students' problem-solving and thinking skills as they actively acquire an understanding of how technologies can work for them. Your students will:

- develop computational, mathematical, design, systems and futures thinking skills;
- learn the basics of block coding and progress to the Python programming language;
- be taught by a specialist teacher from the IMPACT Centre;
- build technology skills and confidence for future online learning and assessments.

NB: *Code Breaker* students can progress to *Web Coder* via our coding pathway.

✓ Improve outcomes

The following graph demonstrates that the achievement of *Years 5-6 Code Breaker* students significantly improved from pre- to post-assessment in 2018-2019.



✓ Deliver curriculum

AUSTRALIAN CURRICULUM - Content Descriptors

Technologies - [ACTDIK014](#), [ACTDIK015](#), [ACTDIP016](#),
[ACTDIP017](#), [ACTDIP018](#), [ACTDIP019](#)

General Capabilities



✓ Develop expertise

- We highly recommend that your supervising staff member/s login, learn alongside your students and collaborate with our specialist teachers.
- They develop curriculum, pedagogy and technology expertise, which transfers to their teaching or leadership role.
- Offer the opportunity to a leader, teacher or aide.
- They earn a PD Certificate aligned to AITSL standards – through active participation in lessons and completion of a short online module.



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Student target group

- Your school determines which students participate – many schools use this program as a differentiation opportunity for mid-high achieving students.
- Teacher judgement and student interest in the topic should assist selection.
- Student or parent nomination is also an option.

Assessment and reporting

- Assessment involves a pre-test to provide diagnostic data, a post-test to measure distance travelled, and check-in programming tasks collected in a digital portfolio.
- Your school receives a written report containing pre- and post-assessment results, attendance data & survey feedback. You also receive report card comments (OLA).

Course outline

1	Inspiring introduction to <i>Code Breaker</i> and online learning skills
2	Pre-Test, overview of programming, think like a computer
3	Graphics and pixels, introduction to block code
4	Programming and problem solving with Block
5	Programming in Blockly - flag challenge
6	Programming syntax - bytes and binary code
7	Password decision making (else/if), problem solving with Python
8	Programming in Python - variables challenge
9	Programming in electronics – electronics kit
10	Debugging code - conductivity with electronics
11	Post-test, programming an electronics kit – code with your kit
12	Futures thinking, the real world of code

Timetabling, group size and costs

- Students participate in 1 x 60 min web conference lesson per week for 12 weeks.
- We negotiate the timetable with you - nominate 2-3 preferred times.
- 3 x 12 week rounds run across the year – *Code Breaker* is available in all rounds.

Round 1: Feb 3-May 22				Round 2: May 25 – Aug28				Round 3: Aug 31 – Dec 4			
Feb	Mar	Apr	May	May	Jun	Jul	Aug	Aug	Sep	Oct	Nov
Available				Available				Available			

- 14-15 students form an online group – from your school or multiple small schools.
- You can involve a full class of 28-30 students – this is classified as 2 groups.
- We operate on a cost recovery model – invest a small fraction of FTE or cash.
- Round 3 cash option is \$290 per student or \$4300 per group of 15 students.**
- Code Breaker* involves an additional charge of \$35pp for an electronics kit.
- Your school is investing in the time of a specialist teacher who works directly with your students and staff and is employed by the Department of Education.
- Consider using [Investing for Success](#) or [Advancing STEM in primary schools](#) funds.
- See [How it works](#) and [Investment options and costs](#) for specific details.



STEM SUCCESS

STAFF: Students were totally engaged and excited during each lesson. At the first lesson one kept turning to me and mouthing wow! There was a wonderful balance in the way the material was presented in a web conference format. Videos, explicit instruction, hands on microbit kits sent to the school and independent open ended activities that challenged and excited our top end students... all that and a very patient teacher.

STUDENT: Learning new things about codes in the Code Breaker Course was an amazing privilege. In the future, I will use the information I learnt about code to push myself further In ICT lessons and computer lessons. I feel honoured that I was chosen for this course, and I feel I know WAY more about code than I did before.

STUDENT: I do have some experience already in python coding (and java) but I still do think this course is helping me, and allowing me to improve my ability to use coding languages. With this course, I can display my knowledge of computers, instead of being just 'the techy one' in class.

[Register Here](#)

[How it works](#)

[Investment options and costs](#)

[View all programs](#)