# Innovate An Initiative of ABCN

*Innovate* is designed to increase Australia's pipeline of problem solvers and innovators by encouraging the uptake of STEM (science, technology, engineering and maths) subjects.

Research indicates that 75% of the fastest growing jobs already require STEM skills.<sup>1</sup> Despite this, student uptake of STEM subjects is declining, creating a skills shortage in the workforce. Adding to this is a disproportionately high percentage of students from low socio-economic areas who are opting out of, or performing poorly in, STEM-related subjects. As subject decisions at school flow on to tertiary and career choices, it is critical that we boost engagement in STEM in the early years of high school if we are to increase STEM candidates at tertiary and workplace level.

*Innovate* aims to address this issue by targeting Year 7 and 8 students to build confidence and learning in these areas as well as their understanding and knowledge of STEM careers.

Mentors wishing to participate in *Innovate* do not require a background in STEM or any technical skills beyond basic maths. Structured sessions involve small groups of students working with two mentors and a facilitator guiding the participants throughout. Program activities will illustrate the practical applications of maths, engineering and design, the use of scientific knowledge to assist with problem solving and innovation, and raise awareness of the wide-variety of STEM-related employment options available.

Initially developed in partnership with PwC, Innovate is now a core ABCN program.



#### THE RESULTS

- > 91% of students said they were interested in STEM *compared to 31% before Innovate*
- > 85% of students said they would like to continue studying STEM subjects in future compared to 27% before Innovate.
- > 93% of students said they were aware of the different STEM-related careers *compared to 31% before Innovate.*

# 2

We learnt how to look at things differently, to be more creative and about working in teams. Having mentors is very helpful as it gives you more confidence to express yourself in learning. Student

# 2

There's a lot of two-way value in a program like this. I was surprised by the students' growth in confidence and collaboration. Mentor



#### THE PROGRAM

The program includes five sessions running across one to two terms. It involves a launch at the school followed by four subsequent workshops of one and a half hours each and a completion ceremony, all held at member company venues.

Session	Where	Who	Duration
Program Launch	School	Principal, teacher(s), <i>Innovate</i> coordinator, mentors, facilitator, ABCN	1.5 hrs
Sessions 1-4	Company	Teacher(s), students, mentors, facilitator, ABCN	1.5 hrs each
Completion Ceremony (held immediately after the final session)	Company	Teacher(s), students, mentors, facilitator, ABCN	30 mins

#### WHO CAN MENTOR ON INNOVATE? THE MENTOR'S ROLE

Anyone who is passionate and interested in inspiring students to pursue subjects that will broaden their career options can take part in the *Innovate* program. No technical skills beyond basic mathematics are required. No background in STEM is required.

The one important requirement of being a mentor is commitment to the program and the willingness to attend every session. For some students participating in the program, their mentors may be the only positive and dependable role model in their lives. If mentors experience an unexpected change to their work or personal schedule and they believe they may not be able to attend a session, they must inform their company champion as early as possible to enable a shared mentor to step in.

For more information about your role as a mentor, please refer to your company's ABCN champion.

#### RULES OF ENGAGEMENT

- > No contact with your student(s) outside scheduled sessions.
- > Do not give your business card, home address or phone, email address or social media information to your student(s).
- > Do not reveal confidential information about yourself or your employer.
- > Do not give money or buy gifts for your student(s).
- > Talk to the school or ABCN if you are concerned about something said to you in confidence (eg child abuse, neglect).
- > Be sensitive to the financial and environmental constraints of your student(s) and their religious/cultural background.
- > Stay professional in conversation refrain from comments about their physical appearance or dress.
- > Be respectful of the different values you and your student(s) may have.
- > You are required to complete the relevant *Working with Children* documentation for your state. Please contact your company champion for more information.

1 A Smart Move: Future-proofing Australia's workforce by growing skills in science, technology, engineering and maths (STEM), PwC Australia 2015

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*Innovate* provides great interaction between mentors and mentees. Its an eye opener for students to have a taste of the corporate world. Teacher

## 2

*Innovate* taught us the different sides of maths and science and how to improve teamwork skills. Student

## 2

A great initiative to give the kids confidence in teamwork, problem solving and meet people in a business job and learn how interesting STEMrelated tasks can be. Student

