

# What is the STEM Learning Hub?

Science, Technology, Engineering and Maths (STEM) education is at a pivotal time in Australia.

To address this, Samsung Electronics Australia and Social Ventures Australia co-created the **STEM Learning Hub** to bring school-based STEM Expertise and support, critical skills development and Samsung technology to Australian communities experiencing disadvantage,<sup>1</sup> where resources are needed most.

<sup>1</sup> A reasonable proxy for disadvantage is a community's Index of Community Socio-Educational Advantage (ICSEA), a scale developed by the Australian Curriculum, Assessment and Reporting Authority (ACARA). We defined relative disadvantage as below the average ICSEA score of 1,000.



## The golden ticket



According to a leading academic at Western Sydney University, technology is seen as **"a golden ticket out of poverty"**.<sup>2</sup>

<sup>2</sup>Can technology help disadvantaged students?, 2018, *The Educator Australia*, 9 May, <https://www.theeducatoronline.com/k12/technology/devices/can-technology-help-disadvantaged-students/249684>

## Working directly with schools



Samsung and SVA are **improving access to technology and STEM education opportunities** for Australia's most vulnerable students, by creating and supporting a collaborative network of schools.

**The tailored support for schools within the STEM Learning Hub includes:**

- Professional development and STEM training for school leaders
- Regional 'Hub Days' to share practice with localised clusters of similar schools
- In-school STEM intervention strategies
- Provision of cutting-edge Samsung technology and support to implement in the classroom
- Thought Leadership Gatherings for leaders from around Australia to convene and share insights, encouraging and facilitating progressive and innovative action in schools

## Reach and impact

**50 schools** in total benefit from the STEM Learning Hub

**15 schools** from **3 states** are in the STEM Learning Hub

**27** Connection Star Hub schools receive Samsung technology and support

**8** additional Connection schools benefited from Samsung support



**2,800 educators**



**28,000 students**

are reached



**8 educators**

from the STEM Learning Hub shared their insights and practice during international exchanges across



**3 continents**

Overall, the educators in the STEM Learning Hub have been involved in

**224**

**days of professional learning per year** (3.6 days each on average)

The STEM Learning Hub demonstrates the very best practice in STEM-related teaching for schools experiencing disadvantage, then **feeds back valuable learnings** into the wider SVA Bright Spot Schools Connection network.

### Raising aspirations



...of STEM Learning Hub school leaders said that their students' aspirations to pursue STEM careers had increased since joining the STEM Learning Hub

The Connection Hub Progress Report 2018

### Enabling great teaching and learning through technology



...of STEM Learning Hub schools said that technology has been an enabler of STEM practice

Data taken from Bright Spots Schools Connection 2018 Annual Evaluation Survey, reported in The Connection Hub Progress Report 2018

### Students are more engaged



...of STEM Learning Hub teachers reported a positive change in engagement and attitude to incorporating STEM practices

Data taken from Bright Spots Schools Connection 2018 Annual Evaluation Survey, reported in The Connection Hub Progress Report 2018

### Student outcomes are improving



...of STEM Learning Hub principals reported that students in their school have experienced improved learning outcomes

Perceptions of student outcomes based on schools' internal evidence

*"Schools must stay in tune with the future skills and capabilities that young people will need to be successful in the future ... the STEM Learning Hub has provided many advantages for our school, particularly by exposing the students from poverty and non-English speaking backgrounds to technology that they would otherwise never get to use."*

– Gail Doney, Principal at Wallarano Primary School

