



# STIMulate

## University-wide integrated STEM support at QUT

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### Overview

STIMulate is the maths, science and IT support-for-learning program available to all coursework students at QUT. The program operates a wide range of complementary modes of delivery to cater for the diverse learning needs of individuals across the university at multiple campuses.

### University-wide STEM support

STIMulate integrates a range of approaches to facilitate independent learning and academic success of students across QUT. This resonates with Zepke and Leach's (2010) actions to improve student engagement. The program utilises the skills and expertise of trained student volunteers, as well as a team of dedicated academic staff, to provide one-to-one and one-to-many support for students.

The program builds on current peer-to-peer support literature (Latino et al., 2012) utilising a university-wide model. Student volunteers, called Peer Learning Facilitators (PLFs), are trained, networked and recognised. They operate "drop-in" spaces where students can visit during office hours, while the academic team run group support sessions supplementing many units and support students using online modes of delivery. In addition to the traditional STEM disciplines, STIMulate supports students from other disciplines, such as Education students with numeracy skills and Nursing students with anatomy and medicine calculations.

STIMulate has undergone iterative development since inception in 2013 that parallels trends within the sector (Nelson et al., 2011). The uniqueness stems primarily from the scalability to a wide audience and provision of support using multiple approaches, including peer-to-peer support and a close relationship with academic teaching staff. This enables the university to respond to the learning needs of students and provide feedback to academic teaching staff in a proactive and timely manner. STIMulate academic staff conduct research on student personas (Sankupellay et al., 2015) and PLF motivation (Devine et al., 2016) to improve program delivery.

The model can provide insight into the possibilities that exist for academic support in higher education.

### References

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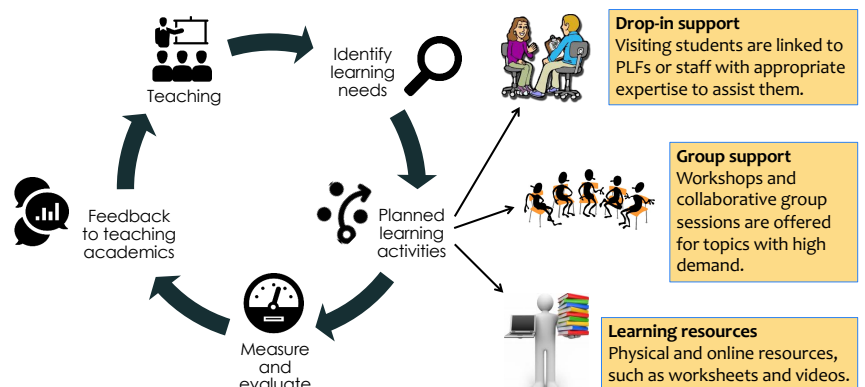
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### The STIMulate support-for-learning model

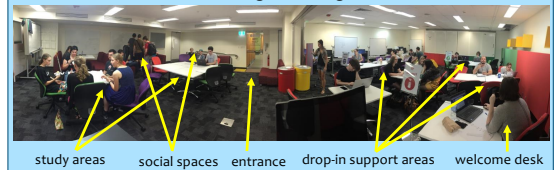


Zepke and Leach (2010) model to improve student engagement	QUT STIMulate model
<b>Research perspectives</b> <b>Motivation and agency:</b> engaged students are intrinsically motivated and want to exercise their agency. <b>Transactional engagement:</b> students and teachers engage with each other <b>Institutional support:</b> institutions provide an environment conducive to learning <b>Active citizenship:</b> students and institutions work together to enable challenges to social beliefs and practices	<b>Proposals for action</b> <ol style="list-style-type: none"> <li>1. Enhance students' self-belief</li> <li>2. Enable students to work autonomously, enjoy learning relationships with others and feel they are competent to achieve their own objectives</li> <li>3. Recognize that teaching and teachers are central to engagement</li> <li>4. Create learning that is active, collaborative and fosters learning relationships</li> <li>5. Create educational experiences for students that are challenging, enriching and extend their academic abilities</li> <li>6. Ensure institutional cultures are welcoming to students from diverse backgrounds</li> <li>7. Invest in a variety of support services</li> <li>8. Adapt to challenging student expectations</li> <li>9. Enable students to become active citizens</li> <li>10. Enable students to develop their social and cultural capital</li> </ol>
	<b>Features improving student engagement</b> <ol style="list-style-type: none"> <li>1. Peer learning support community that engages students and staff in collaborative partnerships, based on intrinsic motivators but enhanced by reward and recognition</li> <li>2. Variety of methods for different needs: one-to-one, workshops and learning resources in both face-to-face and online environments</li> <li>3. Variety of providers: student volunteers (Peer Learning Facilitators) and dedicated support-for-learning academic staff</li> <li>4. Self-defined "success" – from students requiring remedial support through to assistance for high achieving students</li> <li>5. Student-centred learning environments: incorporating social, informal learning and learning consultation areas</li> <li>6. Learning facilitation not tutoring</li> <li>7. Promotes independent and interdependent learning</li> <li>8. Normalises help-seeking behaviour</li> <li>9. Enhances confidence and competence</li> <li>10. Voluntary attendance</li> </ol>

### STIMulate facts from 2016

- 9 academic staff & 2 professional staff (8.1 FTE)
- 169 Peer Learning Facilitators
- 4246 volunteer support hours
- 3651 drop-in support visits
- 2970 group support visits

### The STIMulate room - facilitating a learning community



Watch the STIMulate YouTube video <https://youtu.be/retP8dr6pOo> (3 min 13 seconds) for more information on the program, including short student and staff interviews.



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