

# **Subject Support Tutor Program**

Kaled Idris-Said & Tania Blanksby  
College of Science Health and Engineering  
LA TROBE UNIVERSITY

## **Abstract**

*The combination of widening participation and the uncapping of university places has resulted in increased diversity in the student cohort attending university. A challenge for universities is how to support the increased proportion of students with little academic collateral. This paper describes a new initiative at La Trobe university designed to embed support within targeted subjects - the Subject Support Tutor (SST) program.*

## **Background**

At La Trobe University (LTU), students come from a diverse range of backgrounds and abilities. The drive for widening participation, resulting from the recommendation of the Bradley Report (Bradley, Noonan, Nugent, & Scales, 2009) and the Australian Government's removal of university enrolment caps has further increased this diversity. The Australian Tertiary Admission Rank (ATAR) of students commencing university has lowered quite significantly, the number of students who are the first in family and/or from Low Socioeconomic Status (LSES) - 19.9% in 2016, compared with 17.7% in 2015 (Department of Education, 2016) have increased. The increase in diversity has led to an increase the number of students commencing university who are academically less prepared requiring additional support and resources to ensure their success and retention.

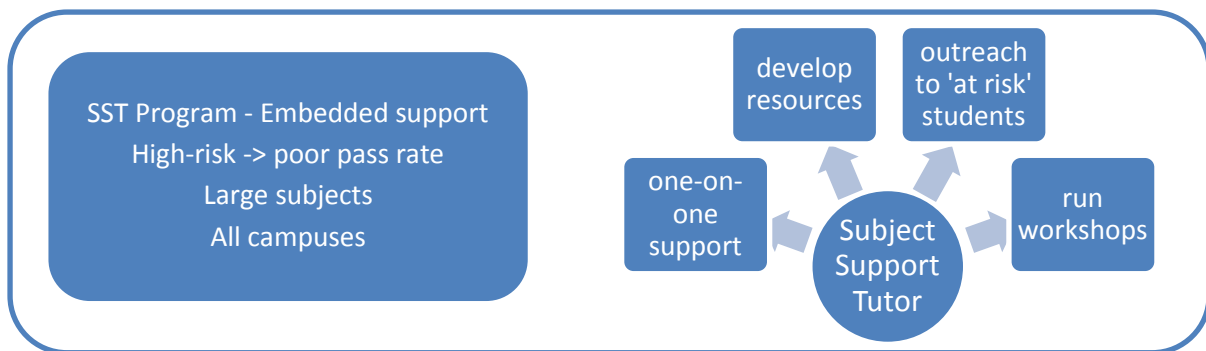
It is known that students who are better prepared for university study tend to have greater academic success and consequently persist in their studies (Lizzio, 2006). In an effort to address and support the increase in students who come unprepared and ill equipped for the academic demands of university, LTU launched the Subject Support Tutor (SST) program in 2013 to support students enrolled in a Bachelor of Arts in 2013. In semester 2, 2015 the College of Science, Health and Engineering (SHE) adapted the SST program to support students in a variety of subjects within the college. This paper will focus on the College of SHE SST program.

## **SHE SST Program**

The SHE SST program aims to improve student retention by maximising student understanding of the subject by embedding support for struggling students in subjects identified by their high failure rate (see Figure 1). By embedding the support within the subject it can be customised to be discipline specific and 'just in time' encouraging student to engage with the support as it is seen as directly relevant. The type of support is flexible to the requirements of each subject and the needs of the student cohort. The program is designed to build 'help-seeking behaviours' to assist students to find the help available, helping them to connect with resources, their peers and academic staff.

By assisting students to improve academically, increasing their self-esteem and social cohesion within the university, the SST program increases the likelihood they will be successful and remain at the university. As Tinto (1993) postulates, students who are disconnected and not integrated academically and socially into the fabric of a university, are less likely to be retained. Furthermore, Thomas (2006), asserts that the type of learning environment inherent in tutoring provides students the means to develop a relationship and a sense of belonging within an institution of higher education. Therefore, the SST program is not only intended to support students achieve academic success but also to give students a sense of connectedness with each other and to the university.

In the supported subjects, student are encouraged to either seek support by attending scheduled sessions or contact the SST for a one-to-one appointment (online or in person). In addition, SSTs also identify particular students that are at risk (by reviewing attendance data, test scores, assignment submissions and other data) and approach them directly. SSTs may approach individuals in class - if the SST is also the regular demonstrator/tutor - or electronically. For example, an SST may identify students with poor test results and send a personalised email to provide assessment feedback or offer a one-on-one appointment.



**Figure 1 SHE Subject Support Tutor Model**

### *Subject Selection*

The criteria for inclusion in the SHE SST program includes: high-risk subjects with pass rates in the bottom 25%; enrolments of 100 students or more, and; prioritises first year subjects. The program is embedded into subjects on the Melbourne, Bendigo and Albury-Wodonga campuses. The program has grown from supporting 11 subjects in its first year to 18 subjects in the last semester. The SST program is funded by the Higher Education Participation and Partnership Program (HEPPP), with the college providing additional funds to support a Masters level subject (Wireless Network Engineering).

### *The Role of the Subject Support Tutor*

The SSTs provide approximately 2-6 hours per week of support, mostly in-group settings but they also offer one-to-one support. SSTs also use skype, host discussion forums on the Learning Management System (LMS) and provide support through email correspondence. SSTs reach out to students identified at risk; via email, phone, or text. Small group sessions typically involve between 2-24 students attending to review current subject content, receive clarification of key concepts, work through material unable to complete in class, and receive advice on assessments.

The SSTs were encouraged to develop resources that will assist students with the subject matter, teasing apart questions, developing model answers and developing online quizzes. These resources may be paper-based, online, narrated PowerPoints or short videos on commonly asked questions, concepts, equations, methods to aide students, and make it readily available via the subject LMS site. This was to build sustainability into the program and ensure the availability of self-help resources for students at all hours.

SSTs, along with regular tutors and demonstrators, are often the only academics to know a student’s name, develop a relationship and can facilitate the sense of belonging to the university community. Some students present with non-academic issues ranging from social and financial to psychological concerns, SSTs were provided with training to support and refer these students appropriately.

Promotion of the SST program within the subject occur throughout the semester. In the first week, SSTs attend the subject lectures to introduce themselves and the program, outlining objectives and how students are able to access them. Lecturers are provided with a PowerPoint slide to show in each lecture and the SST program is promoted on the LMS for the subject.

### *Recruitment, Training & Ongoing Management*

To ensure the SSTs have the appropriate knowledge, subject coordinators identify suitable tutors or demonstrators to join the SST program. Interviews are conducted and those with the highest level of engagement and suitability are invited to the SST training.

Prior to the commencement of semester, a full-day training program is provided to all SSTs via face-to-face delivery. Training includes a historical overview of the program and presentations from key student services, including information on preferred referral protocols and procedures. Training also covers administrative aspects of the program and an interactive workshop on delivering effective and engaging tutor support. The last portion of the training includes the development of subject specific communications and implementation plans in collaboration with fellow SSTs supporting the same or similar subjects.

A SST LMS site was established to store resources and provide a platform for ongoing reporting. SSTs respond to a discussion forum on a fortnightly basis to both report on their activities and student uptake, and also identify aspects that appear to work well or require further development. This reporting mechanism was selected to enable a community of practice where SSTs could share ideas and resources. In addition to fortnightly contact via the LMS, all SSTs attended a mid-semester forum to share best practice, identify needs and discuss issues.

### **Results to date**

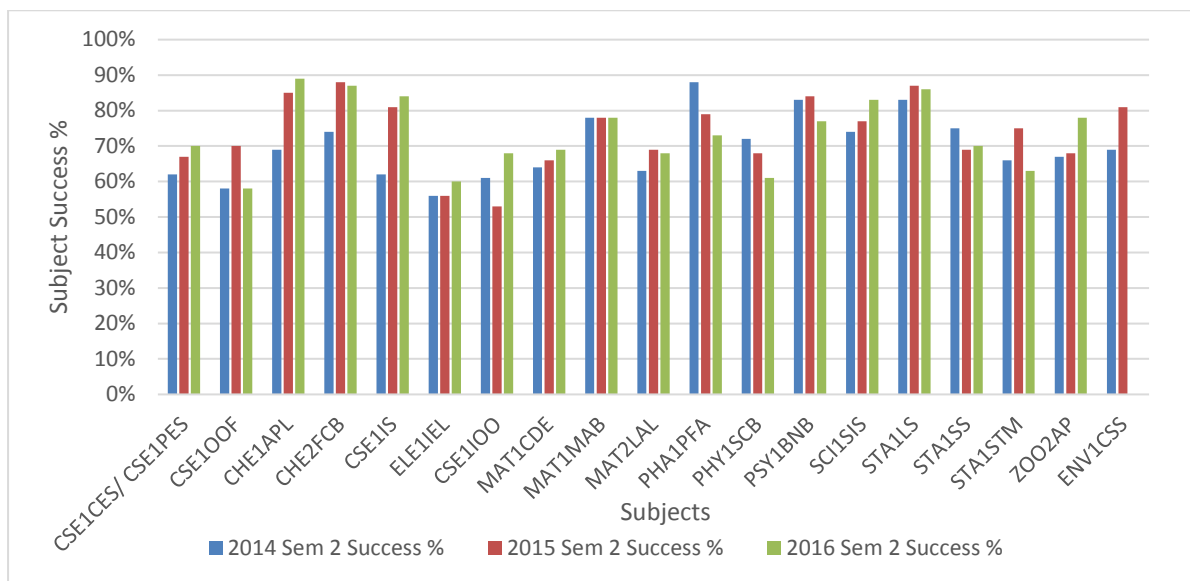
The SST program was piloted with 11 subjects in semester 1 of 2016. Comparisons with same subjects from semester 1 of 2015 indicate an improved positive success rate in 8/11 subjects; 2 subjects scored the same result (see Table 1).

Subject (N=11)	Subject Year	2015 Sem 1 Success %	2016 Sem 1 Success %
<b>Object-Oriented Programming Fundamentals</b>	1 <sup>st</sup> year	58%	57%
<b>Introductory Calculus</b>	1 <sup>st</sup> year	62%	58%

<b>Number Systems &amp; Linear Algebra</b>	1 <sup>st</sup> year	57%	58%
<b>Information Technology Fundamentals</b>	1 <sup>st</sup> year	53%	59%
<b>Discrete Mathematics</b>	1 <sup>st</sup> year	63%	66%
<b>Database Fundamentals</b>	2 <sup>nd</sup> year	62%	67%
<b>Chemistry Foundations</b>	1 <sup>st</sup> year	71%	72%
<b>Applied Biostatistics</b>	2 <sup>nd</sup> year	71%	74%
<b>Introduction to Behavioural Neuroscience 1A</b>	1 <sup>st</sup> year	84%	82%
<b>Wireless Network Engineering</b>	Masters	73%	93%
<b>Fundamentals of Chemistry A</b>	2 <sup>nd</sup> year	73%	80%

**Table 1: Students success rate comparison from subjects in semester 1, 2015 (without a subject support Tutor) and in semester 1 2016 (with a subject support tutor).**

Similarly, in selected subjects for semester 2, 2016 there is a clear increase in student academic success when compared to prior results of same subjects, with 9 of the 18 subjects showing improvement, 5 subjects scoring lower, 3 subjects were within 1% margin lower, and one subject achieved the same score (see Figure 2). It should be noted the average ATAR scores in 2016 for (SHE) College was more than 3 points lower than in 2015 (Department of Education, 2016). Data collected by the SSTs indicates that there was a total of 1397 students who accessed the program in semester 2, 2016.



**Figure 2: Trend of subjects success rates in semester 2 2014 (without SST support), semester 2015, and semester 2 of 2106.**

Feedback from subject coordinators and subject support tutors have been positive and most importantly, feedback from students who participated in subjects where support was provided expressed high regard and appreciation for the program and tutors. Moreover, students survey feedback results continue to be positive and at the conclusion of semester 2 2016, of 85 students who completed the survey, all stated that the SST program was “useful” or “very useful”. More specifically, one respondent to the survey stated that “...I don’t think I would have passed this subject without the subject support...” (Subject Support Tutor program Survey Monkey).

## Conclusion

This paper outlines the College of SHE SST program, an embedded approach to supporting students at risk of failure and attrition. It is difficult to fully demonstrate the impact of the program as many factors impact on student's success and retention. In some subjects the student success steadily increased with the inclusion of the program despite the decrease in the ATAR and academic preparedness of the students, while in others there was little change and even a decrease in success. Although the success of the SST program is varied across the subjects, further analysis is required to drill down at the subject level to understand fully the impact. The SST program can lead to positively connecting and engaging the student with the institution and ultimately supporting retention and success to both student and the institution. Most importantly is the feedback from the students that they find the program useful.

HEPPP funding has been approved for 2017, and we look forward to helping students overcome academic challenges and provide them with dynamic and engaging support. Our aim is to support 18 subjects for semester 1 of 2017. Our ambition is to consider funding for the Subject Support Tutor program that does is not solely dependent on HEPPP.

### References:

- Bradley, D., Noonan, P., Nugent, H. & Scales, B. (2008) *Review of Australian higher education: final report [Bradley review]*, DEEWR, Canberra. Retrieved February 1, 2017 from <http://hdl.voced.edu.au/10707/44384>.
- Department of Education. (2016). *Undergraduate Applications, Offers and Acceptances 2016*. Retrieved from [https://docs.education.gov.au/system/files/doc/other/undergraduate\\_applications\\_offers\\_and\\_acceptances\\_2016\\_1.pdf](https://docs.education.gov.au/system/files/doc/other/undergraduate_applications_offers_and_acceptances_2016_1.pdf)
- Lizzio, A. (2006). Designing an orientation and transition strategy for commencing students. *A conceptual summary of research and practice. First Year Experience Project. Brisbane, Australia: Griffith University*. Retrieved February 1, 2017 from [https://www.griffith.edu.au/data/assets/pdf\\_file/0008/51875/Alfs-5-Senors-Paper-FYE-Project,-2006.pdf](https://www.griffith.edu.au/data/assets/pdf_file/0008/51875/Alfs-5-Senors-Paper-FYE-Project,-2006.pdf)
- Lynch, A., & Quantrill, T. (2013). More than generic skills: Systematic Integrated Learning Advisers (SILA) supporting first year students in low retention courses. Paper presented at 16th International First Year in Higher Education Conference, Wellington, New Zealand. Retrieved March 28, 2017 from [http://fyhe.com.au/past\\_papers/papers13/9G.pdf](http://fyhe.com.au/past_papers/papers13/9G.pdf)
- Thomas, L (2006) Widening participation and the increased need for personal tutoring. In L. Thomas & P. Hixenbaugh (Eds). *Personal tutoring in Higher Education*. Trentham books, pp. 21-31. ISBN 978 1 85856 385 5
- Putnam, T., & Gill, J. (2011). The Bradley challenge: A sea change for Australian universities? *Issues in Educational Research*, 21(2), 176-191.
- Tinto, V. (1993). *Leaving college: rethinking the causes and cures of student attrition* (2nd ed). University of Chicago Press, Chicago; London