

## BIOL 112 – Fostering Self-Regulation in 1<sup>st</sup> Year Science

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### Faculty lead – Karen Smith

Karen incorporates wellbeing teaching practices in her first-year classes to support students' mental and physical wellbeing. She creates a positive learning environment by encouraging students to practice both cognitive and non-cognitive skills that are necessary for academic success. Going beyond the content, students are provided with resources and opportunities to engage in mindsets and skills that can improve self-regulation, social belonging and personal growth. Students' successful development of these self-regulatory practices can support them while navigating academic-related stress throughout their university experience.



### In the literature

“Students who more strongly experience positive emotions, such as hope and pride, and more weakly experience negative emotions (such as anger, boredom, anxiety and shame), are likely to be adopting more of a deep approach to learning” (Trigwell et al., 2012, p. 811)

Fostering academic tenacity supports students to:

- Persevere towards goals
- Experience belonging
- Engage in their learning
- Explore new strategies to move forward (Dweck et al., 2014)



### Project overview

The Academic Scholars Program (ASP),

- exposes students to a variety of activities and behaviors that model academic scholarship
- provides incentive for students to engage in activities that will provide a foundation for academic success
- provides students with opportunities to explore, and reflect on different strategies that may help them self regulate their learning

This research explores the impact of co-curricular activities in a first year cell biology course, Biology 112. Particularly, do students

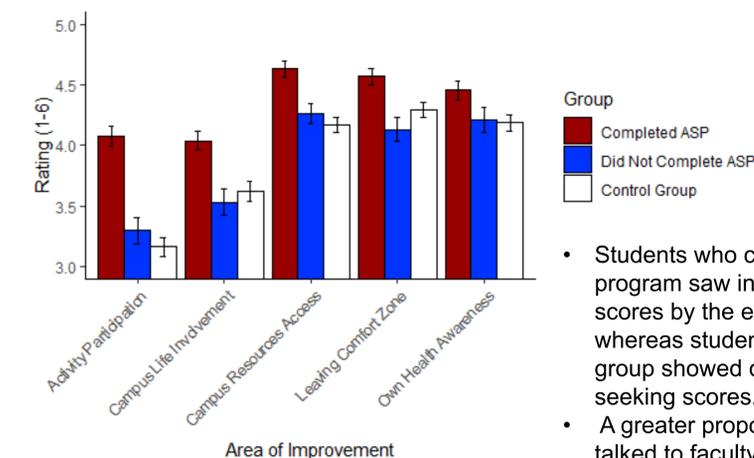
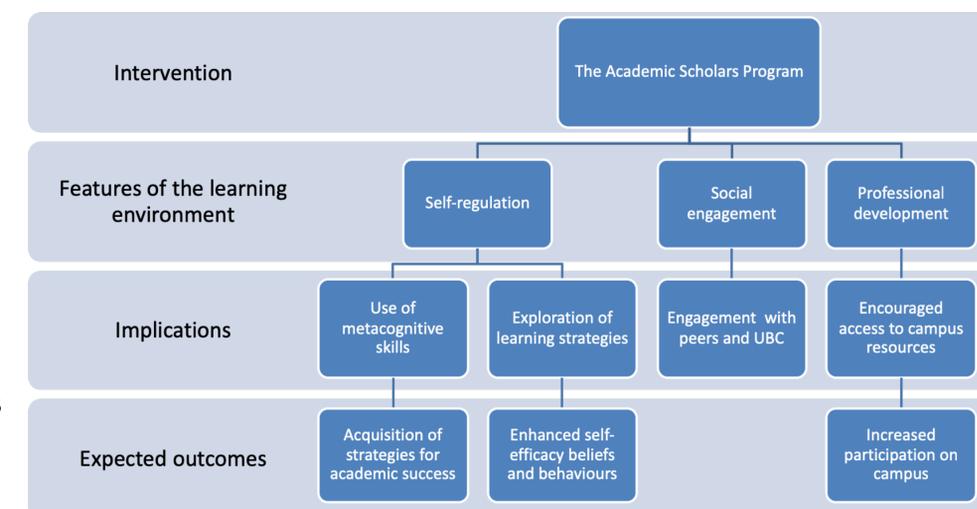
- **experience a change in their perceptions and abilities of self-efficacy?**
- **acquire academic success strategies?**
- **participate in campus activities and resources?**

### Data collection

All students in BIOL 112 were invited to complete a survey at the start and end of the term. Two of the four sections were offered the opportunity to engage with the ASP. Surveys included items from:

- Undergraduate Experience Survey (UBC, 2018)
- Academic Buoyancy (Martin & Marsh, 2008)
- Motivated Strategies for Learning Questionnaire (Pintrich et al., 1991)

### Educational strategy



- Students who completed the ASP program saw increased help-seeking scores by the end of the term, whereas students in the control group showed decreased help-seeking scores.
- A greater proportion of ASP students talked to faculty members about their academic and personal goals over the course compared to students in the other two groups.

### Next steps

- Develop resources for faculty members who would like to explore the ASP in their context
- Assess impact of ASP in additional contexts



### Acknowledgement

We gratefully acknowledge the financial support for this project provided by UBC Vancouver students via the Teaching and Learning Enhancement Fund. We would also like to acknowledge that this project is taking place on the traditional and unceded territory of the Musqueam people.

### References

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