UNSW Learning and Teaching Grants and Fellowship Program

Final Report of Teaching Fellowship: *Public Version*

Student success in large undergraduate classes: Embedding self-management development

- *thefridge.org.au*
- *unistudentsuccess.com/the-fridge*

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pm15/04/16 update: During February and March 2016, JC constructed a "self-management for effective learning" Moodle section which was then imported into all of the 2015 partnership courses+. The advantage of this strategy is that the section can be adapted easily to the learning, teaching and assessment context of the particular course.

 "I've become better at handling the workload of my studies, so now when I'm stressed or burnt out I just take a break instead of continuing to push myself to get things done." (UNSW student)

"I think this is something that should be implemented at all first year level courses." (UNSW Staff member)

1. Acknowledgements

2. List of acronyms used

ASMP = Academic Self-Management Program
COP = Community of practice
JC = Jacquelyn Cranney
LTU = Learning and Teaching Unit
OLT = Office for Learning and Teaching
SM = self-management
Couse = unit, module, subject (not degree program)

3. Executive summary

Self-management is the capacity to work effectively toward achieving meaningful goals, and to be flexible in the face of setbacks (Cranney, Nithy et al., in prep). Self-management capacity is essential both to the successful completion of higher education studies, and to the type of graduate that the future needs. In terms of higher education, it is clear that students experience numerous stressors which, if not adequately self-managed, can lead to distress. There is evidence of substantial distress amongst higher education students, which in turn is associated with poor academic performance. For these reasons, there is a need to integrate opportunities for the development of self-management strategies within the curriculum. This program **sought to embed opportunities for the development of self-management capability in the context of professional development, within the formal curriculum** of primarily first- and second-year large undergraduate courses (in BABS, Chemistry, Psychology, and Taxation & Business Law),. In Semester 1, self-management resources (videos, worksheets) on the topics of time, motivation, study and well-being management, were identified or developed, and integrated into the learning, teaching and assessment strategies of the courses to varying extents (see **Table 1**). In addition, an optional co-curricular program was developed to allow student pre-post surveying. There was insufficient take-up of the co-curricular program to allow reliable within or cross-course comparison, but the qualitative response from course staff and students was encouraging. Semester 2 involved the development of new materials, particularly for PSYC1011 and TABL1710, which enabled evaluation of conditions where self-management activities were more (*cf.* less) embedded. Initial analyses of some variables within those two courses have revealed no significant main effects at the condition level, although analysis of interactions with individual difference variables continues (with potential implications for personalisation). Overall evaluation by staff and students across the courses continues to be positive. The deliverables/outcomes thus far are as follows:

Deliverables (see Tables 1 and 2, and Appendix Table 3):

- Semester 1 and 2 blended implementations and/or resources into 12 courses (4 schools), and indirectly into a further 4 courses (opportunities for approximately 5,000 students).

- Course Coordinator Manual available on ***unistudentsuccess.com/the-fridge***
- Student-centred website created: ***thefridge.org.au***
- Goal setting video created and available on fridge website
- UNSW, national, and intended international workshop/conference presentations
- UNSW workshop organised with presentations from this and related SEF, OLT and student-driven projects.

Outcomes (see Table 2 and Appendix Table 4):
- Identifying which of the self-management strategies are the most promising in different contexts
- Building staff capacity in large first- and second-year courses
- Contribution to improving student success at UNSW
- Continued collaborations through Student Success CoP, national contacts, and whole-of-UNSW initiatives.

Recommendations
1. UNSW includes "self-management" as one its **graduate capabilities** as part of the 2025 Strategy implementation.
2. UNSW strongly supports the *Many Voices, One Vision* project led by Suyin Kee and *Student Minds*, which seeks to pull together diverse stakeholders from across the university into a **collaborative committee** to facilitate collective impact toward improving student belonging, self-management, success and well-being (see Appendix C).
3. UNSW seriously considers adopting (a) the University Student Success and Well-being **framework and staff development** resources being developed by Chi Baik and OLT team at the University of Melbourne, and (b) the mindfulness approaches for staff and students at Monash University (led by Craig Hassed).
4. UNSW continues to support efforts to integrate the development of student self-management into the **curriculum**.

4. Key stakeholders

Course coordinators and associated staff *(in partnership, helped to design, implement & evaluate strategies):*
- BABS: Rebecca LaBard and Stella Sheeba (both 2015 VCATE winners)
- Psychology: Tom Beesley and Kate Hutton-Bedbrook
- Chemistry: Luke Hunter (2015 VCATE winner) and Steve Yannoulatos
- Taxation and Business Law: Leela Cejnar, Lyn Brady and Paul Tuohy

Students *(engaged with and evaluated strategies):*
- Course students: exposure to and evaluation of strategies in Semester 1 and 2
- Informal survey of optional co-curricular program participants (Semester 1)
- Project research assistants: Taylor Innes, Peter Baldwin

University Staff—Academics, Student Support Staff, Leadership *(advised on project):*
- Advisory group: Jan McLean, Sandra Norris, Sue Starfield, Prue Vines, and the evaluator, Lorenzo Vigentini
- Student Success CoP and November 2 Workshop participants
- Ad hoc meetings with SLL leader/staff and with other academics (e.g., Justine Rogers, Law)

Whole-of-University Initiatives *(attempts to support this)*
- *Project Many Voices One Vision* (JC member)
- Academic Board (JC member)
- Student Life and Learning (JC presented at one of their meetings)

5. Project objectives, approach and evaluation

The **aim** of this Fellowship program was to trial the embedding of evidence-based blended learning strategies for the development of self-management capability in large first- and second-year courses, to increase students' capacity to manage, and thus be successful in, their studies.

The primary **intended outcomes** were: (a) identifying which of the self-management strategies are most promising in different contexts; (b) building staff capacity in large first- and second-year courses; and (c) contribution to improving student success at UNSW.

The **theoretical and conceptual framework** for this program is based on (a) transition pedagogy and research (e.g., Kift, 2008); (b) the student life cycle framework, which includes relevant concepts such as psychological needs and identity formation (Lizzio, 2006), (c) the foundations for professional development (e.g., Tano & Vines, 2009). But what are the fundamental issues that continue to drive this work? One is negatively framed, and relates to evidence that students experience high levels of distress, and another is positively framed, in terms of future-oriented 21st Century graduate capabilities. These are set out in detail in **Appendix A**.

Essentially, this project sought to upscale an OLT-funded project (Cranney & Andrews, 2013-15), and continue to "bridge the gap" between extracurricular and curricular resources (human and online) to increase student self-management and success. As part of that OLT-funded project, a prototype curriculum for increasing student resilience and success was developed as a level one elective. The current project drew upon the overall framework of that OLT project (see Appendix Figure 1), the approach taken in the course prototype (Appendix Figure 2), and the expertise and resources developed during the OLT project. It is not practical to require all students to study applied psychology; however, it is possible to provide exposure to psychological literacy via a range of different curricular strategies. This Fellowship project extended the previous OLT-funded work in an attempt to integrate evidence-based self-management strategies into large first- and second-year courses. In doing so, the program addressed LTP 1.1: *Enhance the experience for all students, but especially those in large stage 1 and 2 courses, through the innovative use of technology and the considered use of "digital personalisation".* The self-management resources included topics of relevance to most students, such as time-management and procrastination. This approach is a very particular form of "personalisation", in the sense that students develop self-management skills that they can apply within and beyond the targeted course. A key feature of the approach was that course coordinators chose how to implement the resources in their course (i.e., contextualisation).

The **methodological approach** is outlined in **Table 1,** and Appendix B presents some detail regarding the Semester 1 procedure.

The **strategies for evaluating the project and its outcome**s included: (a) appointment of an evaluator, Lorenzo Vigentini, who gave valuable formative advice throughout the Fellowship program, and whose brief summative evaluation report is attached, and (b) interviews, surveys, and open commentary (e.g., through project meetings) with stakeholders, particularly the course coordinators, advisory group members, and students, throughout the project. Evaluation in regard to specific deliverables/outputs, as well as the outcomes, is specified in **Table 2**. Relevant critical success factors included: the identification of a suitable project manager and programmer; "buy-in" from course coordinators; timely development of resources and overall strategies for each course for each semester; quality control of delivery of strategies; and ethical permission to gather data from students across the courses. Overall, these critical success factors were relatively well met (see **Appendix Table 4** regarding challenges).

6. Project outcomes and deliverables

Table 2 describes the deliverables/outputs and outcomes of the Fellowship program, as well as aspects of evaluation, impact/value, and sustainability. The **Recommendations** (Section 8) provide a brief but significant road map for UNSW's future endeavours in this regard, and the evaluator report contains some commentary regarding impact and value to the university.

TABLE 1: Implementation method and sustainability comments. Video and worksheets focussed on time, motivation, study, and well-being management (see Appendix B and Appendix Table 3 for some detail regarding Semester 1 implementation). SSP = Study Skills for Psychology. SM = self-management.

Schools & Courses	SEMESTER 1 *Implementation*	*Assessment*	*Moodle Self-management section*	*Optional co-curricular program*	SEMESTER 2 *Implementation*	*Assessment*	*Moodle Self-management section*	FUTURE *(Sustainability)*
Chemistry—1st yr CHEM1011 (S1&2; n= 542, 365) CHEM1001 (S1; n = 81) CHEM1031 (S1; n = 520) CHEM1051 (S1; n = 26)	*Moderate:* each of four target videos embedded in different weekly quizzes.	One question per video	Contained four primary videos and three worksheets	Approximately weekly emails; access to additional resources	*Moderate:* each of four target videos embedded in different weekly quizzes	One question per video	Contained four primary videos and three worksheets	Likely to continue to embed in the weekly quizzes with no further ongoing support
BABS BIOC2101 (S1, n = 275) BABS2204 (S2, n = 134) BABS2264 (S2, n = 27)	*Moderate*: ASMP, first video and 3 worksheets well integrated into first 4 weeks of lectures and labs	No	as above	as above	*Moderate*: Goal video and worksheet activities well integrated across the semester, mostly in labs	No		Likely to continue to embed goal and time-management resources with no further support
Psychology PSYC1001 (S1, n = 1091) PSYC1011 (S2, n = 820) [**Other courses** indirectly influenced: PSYC2081 = 432; PSYC3011 = 250; PSCY1031 = 50; PSYC1021 = 50]	*Moderate*: Fourth video integrated into assignment with some tutorial time.	Video in assignment; one question per video on final exam	as above	as above	*Moderate*: Experimental group completed 3 SSP exercises related to SM material.	With each SSP exercise, students needed to summarise main points. Questions in final exam.	No Moodle SM section, as needed to be different for different research conditions.	Likely to continue to embed some self-management exercises with some input from JC.
Tax and Business Law TABL1710 (S1, n = 520; S2, n = 80-650)	*Minimal:* ASMP, first video and 3 worksheets minimally integrated into first 4 weeks of lectures and tuts	No	as above	as above	*Moderate*: Brief exercises at beginning of most classes in 4 tutorial streams (*vs* minimal in additional 4 tutorial streams); Moodle for all.	No	Numerous videos and worksheets to reinforce class activities.	Likely to continue to embed video and time-management. exercises.

TABLE 2: Report on the intended and unintended* deliverables and outcomes from this Fellowship program, as well as the methods of evaluation, statement of impact, and sustainability considerations. SM = self-management.

DELIVERABLES	Description/ achievement	Evaluation Method & Indicators	Impact statement	Sustainability
Semester 1 implementations and **resources** into 4 courses.	See Table 1	Positive course co-ordinator interview comments.	Difficult to gauge. However, approximately 3,000 students exposed to some SM materials and/or activities.	The **Manual,** as well as course-specific materials (eg reuse of material on Moodle; course-specific handouts) will facilitate continued course coordinator involvement.
Semester 2 Implementations and **resources** into 5 courses.	See Table 1	Continuation of engagement of the course directors. Positive commentaries from course staff. Direct comparison of student data yet to be completed.	Difficult to gauge. However, approximately 2,000 students exposed to some SM materials and/or activities.	The **Manual,** as well as course-specific materials (eg reuse of material on Moodle; course-specific handouts) will facilitate continued course coordinator involvement.
*Course coordinator **Manual.** http://unistudentsuccess.com/the-fridge/	Summaries of SM development strategies	Evaluator Report	Relatively new so no impact as yet, but critical to sustainability.	Publicly accessible through UniStudent website; will continue to disseminate.
*Goal setting **video**—created for Fridge website thefridge.org.au/	No suitable video was found so one was created. Student input to design of video.	2 course directors strongly endorsed integration into course. Positive student comments.	Difficult to gauge. However, up to 5,000 students had opportunity to be exposed to this specific.	Publicly accessible through Fridge website; will continue to disseminate.
*Student-centred website: The Fridge **thefridge.org.au**	Created to support co-curricular program in Sem 1, now an open resource referred to in all material. Student input to design.	Positive student comments; Evaluator Report.	Difficult to gauge. However, up to 3,000 students had opportunity to be exposed to this website.	Publicly accessible; will continue to develop and disseminate (including through Fridge magnet and postcards).
Staff resources: http://unistudentsuccess.com/the-fridge/	A new page in the staff section created for Manual and related materials		Relatively new, and continuing to build resources.	Publicly accessible; will continue to develop and disseminate.
2+ publications in prep	Semester 1 focus on qualitative data from staff and students; Semester 2 will also focus on quantitative data; SMS analysis.			Will disseminate.
November 2 **Workshop**	Method for (a) disseminating project outcomes, and (b) advancing the overall student success aim.	Evaluation Summary (see Appendix C). Evaluator Report.	Successful on the day: See Evaluation Summary	See **Recommendations.**
Large **team meetings** which included **coordinators** & sometimes **advisory group members** and **evaluator**	Apart from Workshop, 2 during the year. This allowed open sharing of concerns and ideas.			

OUTCOMES	Description/ achievement	Evaluation Method & Indicators	Impact statement	Sustainability
(a) Identifying **which of the self-management strategies are the most promising** in different contexts	Needs to be linked to assessment tasks (see **Manual**). As surveys indicated, students have different needs, and so a variety of strategies need to be presented in any approach.	Coordinator input. Student reception of resources in class. Student evaluations through surveys and assessments.	Outcome is reflected in the instructions in **Manual**. Semester 1 learning influenced Semester 2 implementation (see Appendix Table 4)	The Manual will be a living document, updated by team members voluntarily. Accounts of other uses and implementations will also be included.
(b) **Building staff capacity** in large first- and second-year courses.	Raised staff awareness (in 4 disciplines) of the issues and strategies.	Interview of Semester 1 coordinators = positive commentary.	*eg* Stella Sheba (BABS) received VCATE partly based on how she integrated our SM materials into her tutoring work.	Coordinators likely to continue SM activities; sustained partly by Manuals, network and JC voluntary time.
(c) Contribution to **improving student success** at UNSW.	Self-report psychological indicators and academic performance.	Reported higher grades in BIOC2101 in 2015 cf 2014. Experimental comparisons yet to be completed. Student and staff positive evaluation comments & engagement. Evaluator report.	Integration of SM strategies will be ongoing.	New 2-way collaborations with SLL & CAPS have been initiated *eg* with SLL Academic Advisors. Support of other course coordinators (*eg* in Law) continues. Support of *Project Many Voices One Vision* to further coordinate **whole-of-university** efforts to improve student success & well-being.
*Continued collaborations through Student Success CoP	The CoP created through OLT project continues to support educators, student support staff, students.	Meetings, and the continuation of informal discussions with CoP members.		The CoP administration is supported by LTU. Annie Andrews and JC will continue to run the CoP. Allows collaboration and support.
*Continued collaborations through national contacts	STARS presentation facilitated Chi Baik invitation for Nov W'shop.		Chi Baik now knows more about this Fellowship and will share that information with OLT collaborators. Similarly for Craig Hassed, Monash University.	Continued dissemination at conferences; collaboration with other universities, *eg* JC is reference group member of U.Melb OLT project into 2016. .

7. Sustainability of outcomes and dissemination strategies

The efforts to optimise **sustainability** of outcomes and deliverables are presented in **Tables 1 & 2**, and further commentary is provided in the **Recommendations** (Section 8) and **Appendix Table 4**. The sustainability enablers generally include five categories: university-wide top-down policy implementation, partnerships with course coordinators thus facilitating continued implementation; the course coordinators' manuals and materials; the websites; the Student Success CoP, which includes continuing conversations with diverse members.

The **manual** provides an overall framework for integrating SM development strategies into courses. A number of different resources are given or referred to (many on Fridge website), and options for implementing each resource is given. These options will vary in the degree of online and in-class engagement, and in the extent to which, and how, the resources and activities are assessed. This will allow choice and flexibility in how the resources are contextualized in a particular course. Where relevant, specific manuals will be written for specific courses prior to Semester 1, 2016.

In terms of **dissemination** strategies:
Presentations delivered or accepted:
- UNSW: 15/4/15 and 1/9/15 Student Success CoP; 16/10/15 UNSW Learning & Teaching Forum; **2/11/15 Workshop** (see **Appendix C**);
- National and International: 1-4/7/15 STARS Conference Workshop (very well attended and received); 30/9-2/10 Rebecca Lebard presented at *Australian Conference on Science and Mathematics* in Perth; 1/10/15 Australian Psychological Society Conference paper; 24/7/16 International Congress of Psychology paper (+ likely other national/international presentations).

Websites: www.thefridge.com (student interface); http://unistudentsuccess.com/the-fridge/ (staff interface). Resources continue to be placed on these websites.
Publications: Course Coordinator Manual; 2 publications in prep.
Artefacts: Postcards and fridge magnets (advertising the websites) distributed throughout UNSW and at conferences.

A summative highlight of this Fellowship program was the Student Self-management Workshop (see **Appendix C**), whereby key stakeholders were invited to listen to presentations from Chi Baik (University of Melbourne) regarding her current OLT project, Jacquelyn Cranney regarding this project, the CAPS team regarding their SEF project, and Suyin Kee regarding *Project Many Voices One Vision* (copies of slides available upon request). Delegates then participated in a discussion, with ***summary recommendations from these stakeholders presented in Appendix C***. The evaluation of this Workshop is also presented in Appendix C.

8. Evaluation of Outcomes

Staff member: ***"The students definitely liked the whole idea of mindfulness and how it could help them manage their stress... seem to be managing their time a lot better than they have previously thanks to the time-tabling component. I've seen students this year, particularly in first year, that aren't stressing out as much as they often do particularly in this later stage in the semester."***

Commentary on the evaluation of outcomes is contained in Section 5, **Table 2**, and in the **Evaluator Report**. The challenges and lessons learnt are described in **Appendix Table 4**.

As intended, this Fellowship program successfully extended the OLT project (2013-15), in that more staff and students in different courses across UNSW have now been exposed to the value of embedding the development of self-management strategies into courses. Perhaps more importantly, this project has assisted in keeping student success and well-being "on the agenda" at UNSW, particularly during this time of significant change. We have accomplished this through our involvement with *Project Many Voices One Visio*n, delivery of staff development events, engagement with Academic Board, and provision of sustainable resources. Indeed, this Fellowship program is consistent with the **UNSW 2025 Strategy** to *"design, develop and deliver a distinctive higher educational experience that will establish UNSW as a leader in transforming our students and empowering them to become the best they can be… This will result in our graduates, as the next generation of professionals and leaders, having the ability to adapt personally to disruptive change"*. A key challenge for the future is to present a convincing case to those staff (especially course coordinators and tutors) who are resistant to this approach (*i.e.,* to embedding self-management development strategies within the curriculum). In this regard, we are

currently learning from similar initiatives at the University of Melbourne and Monash University, and in doing so, we are also sharing and disseminating our innovative approaches to student self-management and success. Most importantly, however, will be ***leadership support for a more coordinated university-wide approach*** to student success and well-being. As indicated in **Appendix C**, there is wide support from stakeholders for such an approach.

Recommendations [and requirements]

1. UNSW includes "self-management" as one its **graduate capabilities** as part of the 2025 Strategy implementation.
   [DVC(A) and Academic Board commitment]
2. UNSW strongly supports the *Many Voices, One Vision* project led by Suyin Kee and *Student Minds*, which seeks to pull together diverse stakeholders from across the university into a **collaborative committee** to facilitate collective impact toward improving student belonging, self-management, success and well-being (see Appendix C).
   [DVC(A), Academic Board, Student Minds, stakeholder commitment; some resourcing for specific projects over next 5+ years]
3. UNSW seriously considers adopting (a) the University Student Success and Well-being **framework and staff development** resources being developed by Chi Baik and OLT team at the University of Melbourne, and (b) the mindfulness approaches for staff and students at Monash University (led by Craig Hassed).
   [DVC(A) and Academic Board commitment; possible project(s) of the collaborative committee—see Appendix C for suggestions.]
4. UNSW continues to support efforts to integrate student self-management development into the **curriculum**.
   [DVC(A), Academic Board, Director LTU, Student Minds, and stakeholder commitment; collaborative committee projects]

Student: *"All the worksheets, practical way to engage with the videos. Very very good A++."*

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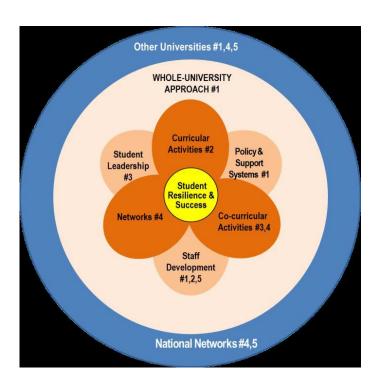
11. Appendices

Appendix A: Rationale--extended

From the *negative* frame, there is evidence demonstrating that university students experience complex stressors that, if not adequately self-managed, lead to distress, and this distress is negatively associated with academic outcome (e.g., Andrews & Chong, 2011; Field, 2014; Larcombe et al., 2014; Stallman, 2010; Universities UK, 2002). This situation appears to be present across all categories of universities (e.g., regional and metropolitan, research intensive and vocational; H. Stallman, personal communication, 7/2/12). Presumably, many students lack the psychological tools to help them to prevent and manage stressors. That is, students do not have the skills to capitalise on their strengths and achieve their potential. We argue that the answer is in evidence-based self-management skills.
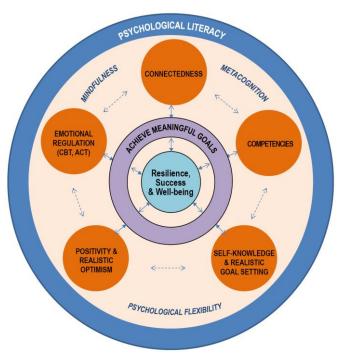
Self-management is the capacity to work toward achieving meaningful goals, and to be flexible in the face of setbacks (Cranney, Nithy et al., in prep). Self-management capacity is essential to successful completion of higher education studies and to the type of graduate that the future needs. Indeed, self-management has been identified as a threshold learning outcome for some disciplines (e.g., Law; ALTC, 2010; Field, Duffey, & Huggins, 2014), and as a general graduate capability (e.g., http://www.unisa.edu.au/gradquals/student/default.asp). Indeed, in terms of the *positive* framing, *we argue that self-management is a fundamental 21st Century literac*y. It is in humanity's best interests that our future leaders, most likely current university students, possess excellent self-management skills.

Self-management is a component of psychological literacy, which Cranney and Dunn (2011) have argued is a key capability for our future. Psychological literacy is defined as the capacity to intentionally use psychological science to achieve positive personal, professional, and societal goals (APA, 2011; Cranney & Dunn, 2011; Cranney et al., 2012, 2015). The study of psychological science provides insight into theory, research and practice relevant to the development of knowledge, skills and attitudes pertaining to self-management. Self-management impacts individual physical health (e.g., behaviour that prevents obesity/maintains good health) and psychological health (e.g., effective goal setting). Self-management skills help students to manage their complex lives, with benefits extended into personal and professional domains. Indeed, law scholars argue that self-development, a component of self-management, is an essential pre-requisite to professional development (e.g., Tano & Vines, 2009).

One of the aims of university education generally is to produce *"professionals capable of ethical self-directed practice and independent lifelong learning"* (UNSW LTS, 2014-2014). This intended graduate capability has several elements: the knowledge and skills of the discipline/profession; personal and professional values to guide ethical professional practice; the meta-knowledge that as a professional, one must continue to update professional practice capacity. "Enabling" aspects of this complex capability include: (a) self-knowledge, because to engage in self-development, which is the basis of professional development, it helps to know one's starting point; and (b) the capacity to manage oneself in the face of the multiple stressors in society generally, and universities in particular (Cranney et al., 2012, 2015). Employers comment that many new graduates do not perform well in their work roles, failing to manage workplace adjustment because of lack of self-management capability (e.g., Lizzio & Wilson, 2004). Such lack of self-management capacity slows or impedes on-the-job growth and adaptation to employer expectations and career demands--hence, the need to provide university students with opportunities within the curriculum to develop their self-management capacity. The current Fellowship program built upon the previous OLT project which also sought to develop university SM capacity (see Figures below).

Appendix Figure 1: Framework for the OLT project (Cranney, Andrews, & Morris, 2015).

Appendix Figure 2: Schematic for the OLT course prototype (Cranney, Andrews, & Morris, 2015**).**

Appendix B: Method detail: Semester 1 procedure and materials (see also Appendix Table 3)

With each of the courses, project personnel worked closely with coordinators to best package and deliver the resources as a coherent strategy, and to take the "best of blended" in terms of delivery. Note that regardless of the exact details of the course implementations, the timing of the release of the materials were approximately similar, so that all videos and worksheets were delivered across the period of Weeks 2 to 6 of the semester.

For ***Chemistry***, the optimal solution for integration was to include each of the four target videos into their weekly quiz, with the video being the first question. These were mastery quizzes, and students were permitted three attempts. The questions were not too difficult, so that students would not be penalised too much by the different nature of this question in comparison to the chemistry questions.

Biochemistry was the only unit whereby a minimal tutor training strategy was implemented. The coordinator asked for time-management resources to be introduced to students across Weeks 1-4 of the semester. The goal selection and time management worksheets were specifically developed to meet this need, and there was special emphasis on the first goal selection video. An interactive session of about 30 min duration was developed to introduce students to goal selection. This was first simulated in a tutor training session. In conjunction with the coordinator, project personnel also introduced the material to students in about half of the classes. Students were also encouraged to seek out and discuss time-management resources with special duty tutors (including Stella Sheeba) who were available for general out-of-class student support. There was no assessment of the ASMP material.

For ***Psychology***, the coordinator suggested integration of one of the videos into the first assignment, which was focused on building students' information literacy and basic methodology skills. Given the endeavour to align the release time of the videos across units, and that the assignment was due in Week 6, it was anticipated that Video 4 would be most appropriate for the assignment. Thus, the mindfulness video was integrated into the assignment, supported by a specific journal article which reported on the positive effects of mindfulness practice on attention and grades. In addition, there was one multiple choice question on each of the videos in the final examination.

For ***Business***, the coordinator was very keen to try out some of the materials, but there was no support for integration. In particular, it was not feasible to undertake tutor training, there was little spare time in tutorials, and there was no option for assessment. At the invitation of the coordinator, the project officer introduced the ASMP in a week 2 lecture, along with the goal selection video. In tutorials in Week 4, the intention was to replay the video and introduce students to the first worksheet; however, this was only accomplished in about half of the tutorials. Similarly over the next week or two, the second worksheet was introduced in about half of the tutorials.

Co-curricular program. A key aspect of the psychoeducational intervention was the optional co-curricular email-based component of the program. One of the primary reasons for the construction of this program was to have students complete the pre-survey which, given ethical constraints needed to be an entirely voluntary exercise. The pre-survey consisted of demographic questions, the SMS, MLSQ, DKR, WEMWBS, BRS,AAQ-II, DASS-S, TIPI.   Students were asked to complete the pre-survey prior to being sent resources. In particular, the program involved approximately weekly emails to students, which referred them to "the Fridge" website. Specifically, on an approximately fortnightly basis, they were introduced to a new self-management module. Each new module contained information about evidence-based academic self-management principles. In the week following the introduction to the new module, participants received a "reminder" email which (a) asked them how they were going with the new module; (b) introduced fellow students' comments on the subject matter of the module; and (c) targeted specific material in the module or introduced new, related material (through a url reference). The co-curricular program started at the end of Week 3 with the release of Module 1; Module 4 was released in mid-Week 9; emails continued until Week 13. The post-survey was introduced in the reminder email at the end of Week 9, with each subsequent weekly email inviting them to complete the post-survey. The post-survey consisted of a demographics survey, the SMS, MLSQ, DKR, WEMWBS, BRS,AAQ-II, DASS-S, TIPI , and the ASMP Evaluation questionnaire.

APPENDIX TABLE 3: Target videos and worksheets [including which Co-curricular Module they were eventually integrated into].

Materials	Description
Video 1: Define Meaningful Goals: https://vimeo.com/120112496 [Goal and Time Management]	This video was developed to present an evidence-based approach to goal selection, including the identification of 6 steps: Decide, Specify, Divide, Prepare, Review, Do It.
Video 2: Carol Dweck Mindset Interview https://www.youtube.com/watch?v=ICILzbB1Obg [Motivation Management]	This video introduced the concept of growth mindset, through a video interview with researcher Carol Dweck.
Video 3: Beliefs that make you Fail or Succeed https://www.youtube.com/embed/RH95h36NChI [Work and Study Management]	This video, presented by Dr Steven Chew from Samford University, presents many common myths about study skills, such as the belief that we are able to multitask.
Video 4: Meditation Summary https://www.youtube.com/embed/Ni2Mxk0YAY0	This video presents information on the science of mindfulness meditation, and presents evidence from neuroscience research on its efficacy in reducing stress and improving attention.
Worksheet 1: Goal selection [Work and Study Management]	This one-page worksheet introduced students to the process of goal selection, including the opportunity to specify measurable goals, and break these goals down into smaller, more manageable components.
Worksheet 2: Time-management [Work and Study Management]	This 2-page worksheet introduced students to aspects of time-management. The worksheet presents students with a checklist, calendar, a section to break tasks down into smaller components, and some quantitative measures of weekly wellbeing.
Worksheet 3: Procrastination [Motivation Management]	This worksheet presents an opportunity for students to think critically about Procrastination, by providing them with a space to identify the tasks they are procrastinating on, the barriers to completing the task, and an action item.

APPENDIX C: Final Workshop and Evaluation

Summary of suggestions from participants in last interactive "work" session:

ADVICE: Always do the "market research": consult students about needs, possible solutions, and ways of delivering and evaluating the possible solutions.

BIG IDEA: A whole-of-university approach for staff and student well-being. 10-year project. Start now! With:

1. Promote the process, as per Kerry Graham's collective impact model. This will involve senior management support, resources, the *continuation of the backbone committee, and the formation of a university-wide working group*. The latter two aspects can be the main projects for 2016.
2. Focus on the notion of *BELONGING*: UNSW students these days do not really feel as though they belong to UNSW, or that they have a voice. Why should UNSW care? If graduates feel a strong sense of belonging to UNSW, they will continue to contribute to UNSW. UNSW should look to other universities who are focussing on this eg the notion of "virtual colleges" (Tony). This is a complex issue, involving notions of community, relatedness, and identity formation, but there

exist feasible strategies that could be piloted. What does it mean to be a UNSW student/graduate? How is this a unique part of the "Scientia student experience"? This could be an *initial focus of the university-wide working group*.

3. Another focus should be a focus on student *EMPLOYABILITY*/professional/career development. Self-management capacity (as a graduate capability) can be "sold" from day 1 in terms of professional development. Again, this can be an *initial focus of the university-wide working group*.

4. Focus on **staff development**, including mainstream academics (eg course coordinators), as well as tutor training (given they are the front-line educational deliverers) (and student leaders where relevant eg peer tutors and mentors). Notion of staff being role model in self-management, in caring. It may be best to wait until Chi Baik's resources are available in September 2016, but relevant units could plan to integrate into programs for 2017 (eg FULT). The *university-wide working group should make this a focus from September 2016*.

5. A small but significant project for 2016: create a comprehensive *"contact card"* for student welfare services and resources that (a) could be used by academics and by front-desk people for referral, and (b) could be integrated into the "emergency" resource that we have in every office. This contact card could be later integrated into good practice resources for staff in terms of promoting student success and well-being. The *university-wide working group should make this a specific, concrete output for 2016*.

Workshop Evaluation

Collaborating toward Student Self-Management & Well-being in Curricular/Extracurricular Contexts?

2/11/15 Workshop Survey/<u>EVALUATION</u>

1. Do you think a whole-of-university approach is important? YES NO Why? *All indicated "YES"*

2. All stakeholders need to be able to feel some sense of ownership if they are to make a truly valuable contribution

3. To develop/ increase our identity, reach some goals, outcomes across a large and divided community. To provide belongingness, ownership, pride, achievement, lifelong tools for success.

4. Not sure yet. The university should acknowledge the importance of this by putting in resources to support local approaches that are developed to address problems.

5. So that there are no gaps, overlaps or duplication of information, everyone can be reached.

7. We need to reach the greatest number of students and need as many people involved in this project to increase the chances of changing the culture of the University.

8. Pockets of good practice are not generally sustainable.

9. Need an integrated model where we all sing from some song sheet! …

10. I think lack of visibility is an issue.

11. To bring together diverse and disparate initiatives in this area.

12. It's the only way to change.

2. How confident are you that the outcomes of this workshop will contribute to a whole-of university approach (and why)?

2. I'm hopeful! I think a number of those present will be interested in getting on board with the working groups and/or the backbone organisation.

3. We had similar ideas across all working groups, we are coming at this at a good time while the Uni is developing plans.

4. All discussions are highly relevant, not sure how they are all aligned with the new strategy.

5. Very confident, these are ideas that are practical and able to be implemented

6. Quantity of people in the room suggests a broad impact

7. I am hopeful that there is a very motivated group of people from different areas that can work together.

9. Somewhat – need to influence those not already on board

10. Fairly confident – student led, 2) those in the room today are diverse, not just the usual suspects. I was disappointed that there were no ADEs there.

11. Butterfly effect, small initiatives can have a big impact in far from equilibrium conditions.

12. Not very confident. They might not be specific enough.

13. Tentative

3. What do you think is the main thing that UNSW needs to do in the next year?

1. Get buyin and increase value of mental health

2. Start developing an accessible MH / Wellbeing Strategy

3. Acknowledge and look after wellbeing of staff and students, get engagement in its implementation of strategies.

4. Make sure the cultural enablers are started to be shaped.

5. Starting with a protocol for giving info to students, referral cards and info, contact etc.

6. Operationalise what it is to belong.

8. Refocus on priority and students

9. Bring a more integrated approach – operationalise the student experience, e.g that Belonging strategy.

10. Value teaching and students as much as research.

11. Think about how these issues, including critical incidents, are reported into Uni exec.

12. Focus on student experience.

13. Depends on the 20/20 vision.

4. In what ways do you think you/your unit could be involved in that agenda?

2. Being the conduit between the uni and the students

3. Work across other services to find ways of engaging faculties and students.

5. Student minds can help with student advice, voice, feedback etc. We can help to connect student advice, voice, feedback etc. we can help to connect students with all services and information available.

7. CAPS has an important role to play as we are an important service for students and staff.

8. Promote as part of development of UNSW strategy.

9. Bring academic development perspective.

10. I am involved in learning and teaching and SLL, work with academics and those with interest in students welfare.

11. Unsure as yet.

12. Many ways.

13. Participate.

5. Please rate, using the scale below, to what extent the workshop objectives were achieved?

> 0 = not at all
> 5 = moderately so
> 10   fully

7.92 *(1.65) Awareness of a variety of curricular and extracurricular strategies*

8.15 *(1.57) Opportunity for different stakeholders to discuss these strategies*

7.69 *(1.38) Awareness of collaborative processes*

7.00 *(1.35) Decision regarding what might be achieved over the next year*

6.   What was the best aspect of this workshop?

1.   The spirit
2.   Very engaging presenters, and well organised in terms of the opportunity for input and discussion
3.   Collaboration across different staff
4.   The discussion
5.   Hearing from so many different stakeholders about ideas and strategies that they have come up with and implemented in the past.
6.   Discussion – time to talk to others for different areas and focuses.
7.   Very interactive and gave us an opportunity to meet some key people.
8.   Gaining awareness of projects
9.   Sharing practice, exploring imaginative ideas with people who care
10. Learning about Student Minds project
11. Discussion
12. The presentations
13. Talking to other people

7.   What aspect was in most need of improvement for future workshops?

5. Goalsetting

8.   Select priority ones / possible outcomes and brainstorm on how.

9.   A more structured discussion

10. Any other comments?
7.   Very enjoyable day, interesting talks and very respectfully moderated!
8.   Fabulous, thanks! Big thanks to Chi for an inspiring start.

APPENDIX TABLE 4: Challenges, and consequent actions/planned actions. SSP = Study Skills for Psychology.

Challenge	Semester 1 actions	Semester 2 actions	Future Planned Actions
Research design: Ethics. HREC Panel C ethics application allowed opt-in surveying only.	Creation of the co-curricular program partly to offer students an incentive to complete the pre- (and hopefully post-) survey. Major issue--there was not enough uptake.	Because the Semester 1 approach did not produce enough student completions of the surveys, in Semester 2 paper surveys were used for all tutorials in PSYC1011, and a sample of tutorials in TABL1710.	As with Chemistry, quizzes will be integrated into future course implementations where feasible.
Research design: Comparisons. December 2014 notification meant that start-up was rushed, and negotiation with coordinators regarding within-course manipulations (with high internal validity) was not feasible. Note that within-course manipulations are the best approach for (a) evaluation, and (b) experimental manipulations of how resources are delivered. Moreover, all coordinators clearly preferred some level of implementation, and thus the proposed "no-implementation" comparisons were not feasible. Instead, moderate *vs* minimal implementations were compared when feasible.	The data analysis approach will be primarily between courses, which has limitations in terms of evaluation conclusions. Within-course (quasi-experimental) comparisons will focus on co-curricular ASMP involvement.	For PSYC1011, an experimental and comparison condition was constructed. For TABL1710, 4 tutorials integrated regular SM activities, whereas 4 did not.	Further experimentation will be at the discretion of course coordinators.
Resources/L&T strategies. Designing materials that could be integrated into non-psychology courses was a greater challenge than we had anticipated. Components of PSYC1031 could not be simply rolled out without a high level of staff training.	The short-term solution was to locate or create very short videos that would convey an evidence-based message about self-management. Partly in response to Biochem's needs, work-sheets were designed related to the concepts in the videos. Then, as part of the co-curricular program, a website (www.thefridge.org.au) was developed which organised videos and worksheets into learning modules.	For the PSYC1011 manipulation we designed 3 resources related to procrastination, time-management and stressor management. We will make these available on the unistudent website. We continue to develop the Fridge website and add resources.	The Manual, and the websites, will continue to evolve, partly in collaboration with CAPS, SLL and TLC, and with some limited funded and voluntary maintenance. We will scope the possibility of other innovative resources and platforms, including the possibility of a MOOC. We will tailor manuals for each course if requested, to help sustain these activities into 2016.

Staff development and training. Initially there was little time to engage with course coordinators and associated staff (eg we needed to determine the key common resources within the first two weeks of February in order to set up Chemistry Moodle online quizzes and prepare Biochem materials). This meant that there was almost no time for staff development and training, which is arguably a primary method of increasing the impact of the ASMP program.	At the invitation of the coordinator, team members contributed briefly to tutor training, and presented at some lectures and tutorials in BIOC2101 in the first 4 weeks, in relation to the first major ASMP topic (managing goals and time). Otherwise there was reliance on the senior staff's relationship with tutors to deliver the program. This sometimes fell short, thus reducing the effectiveness of the implementation.	In Semester 2, contact was established with all PSYC1011 tutors through the pre-survey process, whereby there was further opportunity to explain the process. A professional relationship with the key TABL1710 tutor was also established.	The Manual as well as specific course manuals will constitute guidance to staff wanting to implement these resources into their courses and programs. JC will voluntarily assist when asked, and when feasible.
Assessment. A primary method of increasing impact is assessment integration; however the discipline knowledge is psychology, and there is understandably reluctance by coordinators and students to take on assessment of "non-core discipline" material. In contrast, where material is assessed, there is little scope for high-validity within-course comparisons.	Chemistry found a way to integrate the videos as the final item in their formative weekly online quizzes. This meant that all students should have been exposed to these videos at least once. PSYC1001 had an early assignment whereby a video and related journal article were able to be integrated. BIOC2101 and TABL1710 could not accommodate assessment.	Chemistry continued with the online quizzes. PSYC1011 SSP exercises were assessed, and there were exam questions in the final exam on that material.	Chemistry and psychology may continue with assessment of the material.
Personnel skill sets and project complexity. Team members are all highly dedicated to the Fellowship aims, but a different mix of skills were needed compared to that anticipated. This is due mostly to the evolving nature of the project—which has turned out to be much more complex and demanding than originally anticipated.	The mid-January to late May period constituted three phases: (a) the mad rush to deliver materials to course coordinators during mid-Feb to late-March; (b) the creation and delivery of the main part of the co-curricular program during mid-March to late April; (c) planning for evaluation and for Semester 2 during May. (Progress was also interrupted by illness of the project officer and Fellow.)	Again, developing and delivering the PSYC1011 implementation was highly demanding. TABL1710 and BABS2204/2264 also required weekly organisation with the coordinators, and almost weekly appearances within the tutorials/labs. The entry of data from the pre- and post-surveys proved to be an enormous commitment of staff time.	