



Smart Study



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Investigating the link between academic confidence and student wellbeing

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Interim Report

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Study commenced in March 2023; due to conclude in November 2024

Abstract

The growing emphasis on self-regulated learning (SRL) in education has highlighted the imperative of nurturing independent learners, especially against a backdrop of rising academic stress. This research seeks to understand the relationship between teacher-facilitated structure and student autonomy and its connection to student academic confidence. Specifically, it investigates how a structured study skills program can foster student independence and influence academic wellbeing. Preliminary findings from a longitudinal study targeting Stage 5 secondary students indicate positive shifts in autonomy support and enhanced self-regulation and planning skills. A notable correlation has emerged between student-perceived autonomy support and teacher-provided structure. The data underscores the role of a structured approach in facilitating independent learning, validating the importance of explicit instruction in study skills.

Rationale

The Government Productivity Commission highlighted student wellbeing as a key area of concern for Australian schools (*Review of the National School Reform Agreement, 2022*). One fifth of Australian high school students experience low levels of mental wellbeing, with over two thirds of those students identifying school or study as the primary cause (Henebery, 2022). In October 2022, the NSW Education Budget allocated \$203.7 million over two years to address declining youth mental health through 'proven student wellbeing and mental health initiatives' (Clark, 2022). Whilst beneficial, the funding was largely allocated to the management of symptoms through the appointment of school counsellors and psychologists; the funding did little to identify or address the cause of declining mental health rates in students.

Australian Schools do much to try and proactively improve adolescent wellbeing through programs of varying efficacy; these include a multitude of topics including sleep, online behaviour, nutrition and healthy relationships, areas over which teachers often have little control or expertise (Gunawardena et al., 2023). The area in which teachers are experts is academic study, consistent with the reported primary area of concern for students (*Youth and Young Adults, 2014*). On average, Australian students spend over 10,000 hours in the classroom every year (OECD, 2014); it stands to reason that students who feel competent as learners report higher levels of general wellbeing (*Living Well, 2014*). This study explores the extent to which explicitly taught self-regulated learning strategies (SRL) positively impact factors affecting student wellbeing.

The Strategic Plan for Mental Health in NSW *Living Well (2014 -2024)* indicates a positive relationship between a young person's ability to self-regulate and good mental health; it is therefore crucial that schools support students in developing self-regulation strategies. Research suggests that SRL is the key to improving student motivation and engagement, a critical factor in academic success (Hattie, 2009). Self-regulated learners are more likely to be able to adapt to the needs of a world that now demands life-long learning, but more importantly to the context of this study, students are more likely to view the future with optimism (Zimmerman, 2002). There is a positive relationship between SRL and feelings of self-efficacy, creating a virtuous circle of self-regulatory processes, affirmation of performance through self-monitoring and motivation (Zimmerman, 2002). As well as the policy imperative, research has found predictive links between metacognitive learning strategies, positive emotions and academic performance (Hayat et al., 2020), making SRL a key capability for students in the context of this study.

Approach

CONTEXT

This study is being conducted at Queenwood, an independent girls' school delivering NESA & IB curricula to approximately 900 students on Sydney's lower North Shore. A pilot group of approximately 180 students in Years 9 & 10 are explicitly taught SRL strategies in weekly 20-minute *Smart Study* lessons. Lessons are largely delivered as lectures, to ensure consistency of delivery, with Tutors following up each term in one-to-one meetings with individual students.

CURRICULUM

The curriculum comprises eight outcomes adapted from a study conducted by Effney et al. (2013). The curriculum combines outcomes previously taught in Wellbeing sessions (2, 3, 4, 6 & 8) with outcomes deriving from the science of learning (1, 5 & 7), as below.

1. Self-evaluating
2. Organising and planning
3. Goal-setting and motivation
4. Seeking information
5. Rehearsing and memorising (Jones, 2020)
6. Seeking social assistance
7. Transforming (Cottingham & Ausubel, 2023; Lovell & Caviglioli, 2020)
8. Environmental structuring

There is a particular focus on cognitive science and the nature of memory to support students in identifying optimal study strategies and contexts in which each are best deployed (Dunlosky et al., 2013).

Formal examinations, replaced during COVID-19 lockdowns with alternative modes of assessment, have been re-established providing opportunities for students to practise SRL strategies taught in *Smart Study* lessons. Research shows that students are better able to manage healthy levels of stress if they are first taught effective stress management strategies – if they feel capable (Magness, 2022). It is anticipated that *Smart Study*, combined with gradual exposure to healthy levels of academic stress resulting from formal examination blocks, will improve student ability to manage associated feelings (Foulkes, 2021) and build academic confidence.

AIM

The aim of this study is to explore the impact of a program teaching self-regulated learning strategies. By implementing a purpose-designed evaluation and research program, we intend to create an impactful, sustainable study skills program improving student self-efficacy and key indicators of student wellbeing.

RESEARCH QUESTIONS

- How do students' perceptions of themselves and their capacity for learning change during and post-engagement in a structured study skills program and why?
- What kinds of behaviours do students engage in, and what do they say about how this affects their approach to learning and why?
- How do teachers talk about their experiences of the program (planning, teaching, professional development)?

CRITICAL FRIENDS

Program Development

Queenwood works closely with Churchie (Anglican Church Grammar School, Brisbane) who has been delivering a study skills program, [A Learner's Toolkit](#), to boys in their senior school since 2018. We share best practice and adapt supplementary resources to suit our context.

Academic Mentor

[Associate Professor Paul Evans](#) from the University of New South Wales School of Education is supporting the research team in measuring changes in student motivation and self-perception during program delivery.

METHOD

The population under study comprises secondary students, specifically those in Stage 5. The study employs a non-probability, convenience sampling method, with a sample size of approximately 180 students. This research project adopts a quantitative and longitudinal design, which facilitates an examination of how student perceptions of autonomy support and structure change over time. The methodology involves survey scales derived from previously validated measures of the constructs being investigated. Specifically, the study uses a Likert style questionnaire, tailored to fit the context of the study skills program.

Implementation

STAKEHOLDER LIAISON

The research team includes Emma Macey (Director, Strategic Innovation & Year 10 Coordinator), Rebecca Birch (Director of Research Practice), Suzanne Kerr (Director of Wellbeing), Lara Harvey (Head of PDHPE & Study Skills Coordinator), and Carla Younan (Senior English Teacher & Year 9 Coordinator). The research team meets fortnightly in a timetabled meeting. With the departure of the Principal, replacement executive sponsors include Allison McCulloch (Director of Curriculum), and Belinda Moore (Acting Principal).

A larger group of staff interested in resource development meet fortnightly in alternative weeks to plan the *Smart Study* curriculum. Regular members of this team include Emma Bergin (Head of History, Instructional Leader & Year 9 Tutor), Gail Story (Head of Specialised Programs), Cathie Wotherspoon (Head of Libraries), and Jade Gibson (Head of Drama & Year 12 Tutor). Each member has volunteered to develop expertise in a particular smart study outcome and have responsibility for associated staff professional development, student lessons, and resource development.

Individuals within the project team are assigned specific responsibility for managing stakeholders as indicated on the next page.

Queenwood offers staff scholarships to approximately 10 staff to complete a Master of Education. Current recipients represent the majority of the project team. Postgraduate study combined with action research is building knowledge and capacity in staff and fostering a positive culture of professional learning. Discussions connected to the project continue in departments across the school, bringing rigour to discourse through shared vernacular and improved capacity for professional reflection and research.

Staff turnover has been identified as a key risk, with one of the resource development team moving on to another opportunity in 2024. Similarly, movement in the team of Tutors, due to long service leave and other reasons, means that new staff will not have received equitable professional learning or experience of being involved in the program. Succession planning and dialogue with key pastoral leaders may go some way to preventing a lack of fidelity in the support provided to students. In a similar way, key pastoral leaders have expressed concern that the project is adjacent rather than integral to student wellbeing, creating some conflict about how time and space resources are used. Meetings have been scheduled to ensure whole-school alignment and to protect the integrity of the project.

Staff

Lara Harvey updates staff on *Smart Study* via briefings during weekly staff meetings and emails outlining *Smart Study* content and associated resources. Through this approach, we ensure that all staff members are not only well-informed about the *Smart Study* curriculum but are also equipped to integrate these strategies and tools into their own teaching practice.

Stage 5 Tutors actively participate through observation and facilitation of lecture-style sessions. Each term Tutors facilitate one-to-one meetings with individual students to offer coaching related to goals, motivation, and general wellbeing.

Planned improvement: Liaison with Heads of Academic Departments with a view to integrating strategies into the homework schedule for specific subjects. It is hoped this will embed student understanding of when best to deploy strategies according to content type and desired outcome.

Students

Jade Gibson convenes the student advisory committee comprising of one student from each Tutor group, 15 in total. The committee meets each term, reporting to the research team and then their peers. During their initial meeting student advisors identified three missions: feedback for improvement; facilitating smooth operations; raising awareness within and beyond the school. Recommended adjustments are made where possible. Students report in person to the cohort each term, and this is followed by a staff response.

Examples of student advisory committee feedback include:

- *Feedback for improvement*
“We found Cornell Notes a helpful strategy, but the format is limiting. Can you offer direction about which subject we should use this format...It would be good for subject teachers to explicitly go through a strategy like Cornell notes so we can use it in class, or for homework. Subjects like History did this and it helped.”
- *Facilitating smooth operations*
“We like the new booklets but most Tutors collect them so we couldn’t access them over the weekend; can we have it online as well?”
- *Raising awareness*
“We enjoyed creating the *Smart Study* trivia; it was a fun way to revise.”
“We need all Tutors to be consistent in checking our progress.”

Planned improvement: At the conclusion of the project, the girls are hoping the AIS will facilitate an opportunity for student advisors to present to other schools.

Parents

Suzanne Kerr facilitates Parent Seminars for each year group and has integrated *Smart Study* into the program for Year 10. Parents have appreciated evidence-informed recommendations for how they can best support their daughters in effective study, which are reiterated in occasional 'Spotlight articles' in the weekly newsletter and QNews, the school's biannual magazine.

Planned improvement: In Term 4 a standing *Smart Study* item will be included in the weekly parent newsletter to help ensure consistency of messaging between school and home in the critical period leading up to formal examinations.

AISNSW Member Schools & Australian Schools

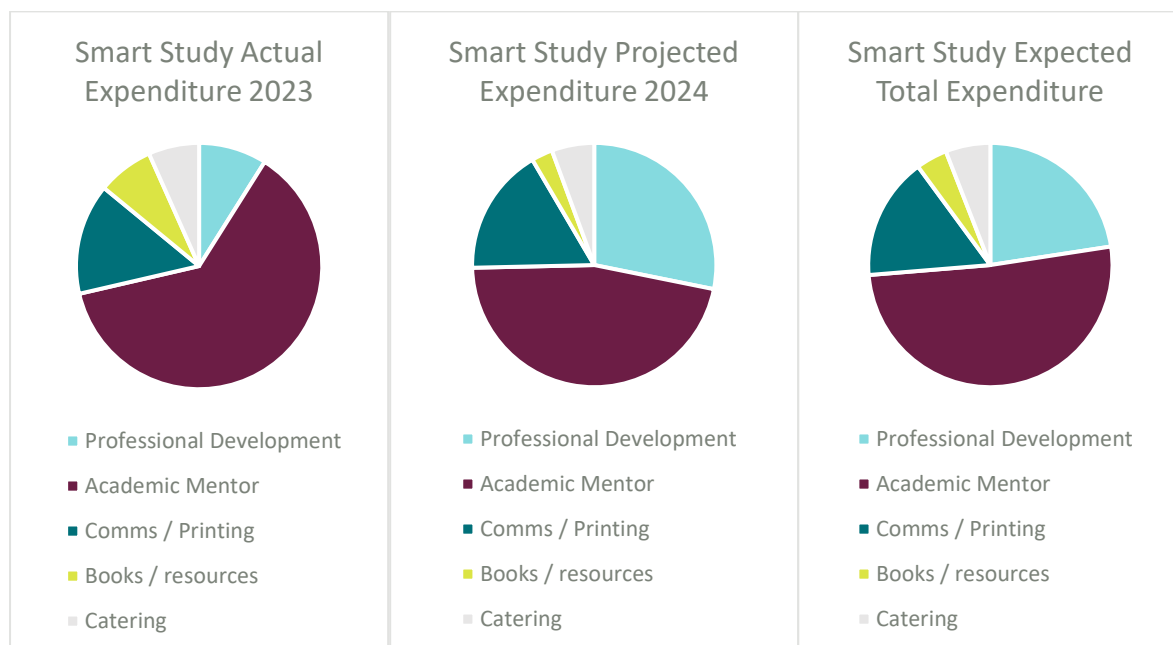
In light of the Review of the National Schools Reform Agreement in late 2022, it is incumbent on the sector to participate in discussions related to how best to track and report on wellbeing outcomes. The research team have attended a series of conferences presenting progress on this project, and discussing the nature and efficacy of wellbeing programs in schools. These presentations include: the online *Teach Meet* and the *Matter of Translation* [conference](#) hosted by Churchie in 2023; Sharing Best Practice Illawarra; and the AISNSW Research in Schools Showcase. In addition, thought leadership pieces have been disseminated via social media channels and the Sydney Morning Herald.

Planned improvement: A media and communications plan and associated resources will be developed for 2024 to ensure research findings are shared within and beyond the sector.

Budget

The primary cost to date has been teacher release for meetings, professional development and attendance at conferences and project days; this cost has been borne by Queenwood. Allocation of the AISNSW funding is outlined below. The primary funding allocation has been academic mentoring, and this will remain consistent into 2024. The decision to prioritise this resource supports our prime imperative of building capacity in staff to manage action research independently in the future. This affirms Queenwood's commitment to evidence-based decision making.

Towards the conclusion of the project, a greater proportion of the funds will be allocated to communications, to ensure research findings are captured and disseminated in a concise and accessible manner within and beyond AISNSW member schools.



Interim Results

In relation to adjustments and changes to the project, the rationale and design have remained unchanged; however, early indications suggest that the target variable, academic stress, remains unchanged while other indicators of wellbeing show greater promise. As such, reporting of outcomes will reflect this finding and give impetus for further research into the sources of academic stress and its prevention. The researchers are pleased to report an increased and more direct role of Tutors in mentoring and monitoring students as they develop their skills in independent study.

Interim results indicate shifts in a key indicator of wellbeing, namely autonomy support and structure (see Table 1). In addition, students report improved planning skills in relation to study and assessment. Improvements were also seen in students' ratings of their abilities in self-evaluating and seeking social assistance. These results are statistically significant ($p > .10$). In addition, the researchers have found a correlation between student-reported autonomy-support and teacher-provided structure. The study skills program at the centre of the research is explicitly taught and these results suggest support for the notion that structure is a necessary precondition for later independent learning (Kirschner & Hendrick, 2020).

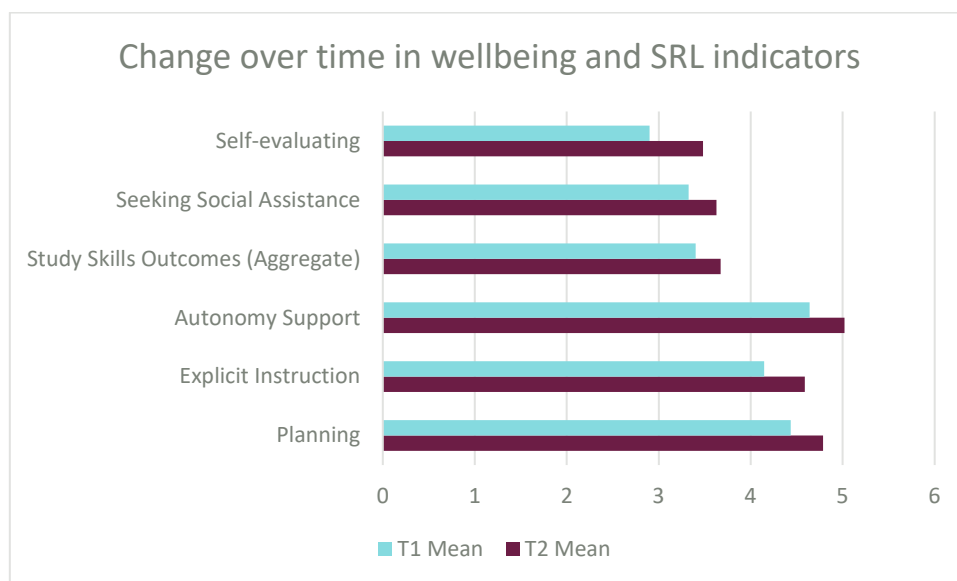


Table 1: Change over time in wellbeing and SRL indicators

While key indicators of wellbeing have shifted, more direct measures of academic stress, such as those resulting from assessment itself, remain unchanged. Opportunities exist to make the links between competence and autonomy, and similarly autonomy and wellbeing, more explicit to students, through the content and sequencing of lessons. At the time of writing, the program has been running for only two school terms. As such, the researchers may be yet to see changes in this area. A renewed instructional focus on the why and not simply the how may result in lower levels of assessment stress for Queenwood.

To date, only one focus group and survey have been conducted for teachers, with another planned for Term Four in 2023. While there is broad consensus about the importance of SRL, teachers report a lack of time to teach these skills and some frustration about the motivation of their students. Some teachers value explicit instruction while others are ambivalent. The next round of focus groups and surveys may show a shift in attitudes after their involvement in two terms of the project.

Final comments

Initial findings of the study are consistent with a systematic review of the *Efficacy and Effectiveness of Universal School-Based Wellbeing Interventions in Australia* published in the National Library of Medicine last month. The review concludes that wellbeing interventions with the greatest impact in schools combine 'social and emotional development with academic achievement' (Gunawardena et al., 2023). In addition, the paper found that teacher-delivered interventions with training and/or professional development are effective for implementation of school-based interventions. These two factors – exploration of the relationship between wellbeing & academic confidence; and program delivery by school staff in favour of external providers – affirm the *Smart Study* program structure.

In addition, a notable unforeseen outcome related to the Stage-wide approach to study is the uptake of retrieval strategies in the classrooms of teachers with no association with the project. Much of the professional learning in 2023 has aligned with a more explicit and evidence-based approach to teaching and learning, with several heads of department engaging in an instructional coaching program. These heads introduced 'Do Nows', which see students retrieving previously learned content at the beginning of each lesson. This widely and voluntarily adopted practice suggests a strong alignment with the research underpinning *Smart Study*.

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