

Students' Perspectives on their Experiences within a Students as Partners Project

Beata Francis^a, Aleksandr Litvinov^a, Anh Nguyen^a, Sophie L. Vuillemin^a, Ella, M. Chegwidan^a

University of Technology Sydney^a

Corresponding Author Email: Beata.Francis@uts.edu.au

ABSTRACT

CONTEXT

The application of Students as Partners (SaP) programs and approaches within the context of higher engineering education is on the rise. When students work as partners with faculty staff, they can achieve positive outcomes and help initiate a shift in faculty culture. Recognising the benefits of integrating the SaP initiative, universities are making efforts to incorporate elements of this approach into the curriculum.

PURPOSE OR GOAL

The C.A.R.E.E.R Compass portfolios initiative was introduced to FEIT to achieve the cultural shift and create a community where students feel connected to the faculty and the engineering profession, personally accepted and respected. This pilot project was run between September and November 2023 at FEIT UTS. Eight C.A.R.E.E.R Compass Champions, one professional staff and two academics were involved in this initiative.

APPROACH OR METHODOLOGY/METHODS

In this "Innovative pedagogy" paper, the C.A.R.E.E.R Compass champions' narrative about their experience participating in this project is presented. This narrative involves students' reflections on program results, limitations and future steps. This narrative is supported by program coordinators' reflections on the program goals and expected results.

ACTUAL OR ANTICIPATED OUTCOMES

As an outcome, the staff-student co-authorship description of their experience is presented. This description involves discussions about project design, evaluation, and learning sustainability practices. At the same time, the analysis of outcomes related to culture shift is provided.

CONCLUSIONS/RECOMMENDATIONS/SUMMARY

Engineering educators and learning designers can use the description of experiences presented in this paper when designing their own programs that are based on the student-as-partner approach. At the same time, the narrative demonstrated in this paper can be used as an example of projects focused on achieving the faculty culture shift.

KEYWORDS

Students as Partners, Extracurricular activities, Engineering faculty culture.

Introduction

According to Mercer-Mapstone et al. (2017), "Students as Partners" (SaP) approach embraces staff members such as academic or professional staff and students working together on different teaching and learning tasks. The foundation of this approach can be considered the phenomenon of "partnership". Cook-Sather et al. (2014; p. 6–7) view the concept of student-faculty partnership as 'a collaborative, reciprocal process through which all participants have the opportunity to contribute equally, although not necessarily in the same ways, to curricular or pedagogical conceptualization, decision-making, implementation, investigation, or analysis'. Healey et al. (2014) as part of their workshop state that the "students as partners" approach can be used not only for the teaching and learning but also for the design of learning and curriculum activities, assessments, pedagogical consultations, subject-based research etc. At the same time, Matthews et al. (2018) assume that partnerships might be used to develop an institutional culture where egalitarian learning communities are valued.

Student-staff partnerships may have many positive outcomes for both students and staff members. Mercer-Mapstone et al. (2017) conducted a systematic literature review on the topic of student-staff partnerships in higher education where 65 papers published in 2011 and 2015 were analysed. In this study, authors conclude that 56% of scholarly materials demonstrate a positive impact on students' motivation, engagement and ownership for learning, and 45% of papers demonstrate an increase in self-efficacy or confidence. In comparison, 39% and 37% of analysed papers demonstrate an increase in understanding the experiences of others, such as staff members, and an enhancement in the relationship between students and staff, respectively. At the same time, the results of this literature review outline some positive outcomes for staff members, such as an enhancement in the relationship with students (43% of papers notice this outcome), development of better or new materials related to teaching or curriculum (31% of papers notice this outcome) and an increase in understanding of the student's experiences (28% of papers notice this outcome). Student-staff partnerships can also influence emotions. Healey and France (2024), in their study, identified that participants may experience varying levels of hope, pride, anxiety, and frustration throughout these partnerships. Therefore, the authors recommend acknowledging and supporting the emotional well-being of both student and staff partners.

However, despite the increased attention from researchers to the topic of student-staff partnerships, Mercer-Mapstone et al. (2017), in their study, note the low rates of staff-student co-authorship publications. At the same time, the authors recommend exploring how staff-student partnerships transform institutional cultures. In this innovative pedagogy paper, the students' and staff members' perspectives on their experience of taking part in the C.A.R.E.E.R Compass program will be presented. C.A.R.E.E.R Compass is a student as partners (SaP) program that is designed to push a transformative shift in educational paradigms, with a focus on cultivating Collaborative, Agentic, Response-abled, Engaged, and Employment Ready (C.A.R.E.E.R) students. In this paper, an overview of the C.A.R.E.E.R Compass program will be presented first. Then, the students' narrative that includes their perspective on program results, future sustainability of the project and the program limitations will be presented. The narrative will be supplemented with comments from the program coordinators to provide a full understanding of the program experience. This narrative was created and documented during a group discussion involving three participants.

C.A.R.E.E.R Compass Project Overview

At the Faculty of Engineering and Information Technology in UTS, the academic and professional staff members regularly ideate on how to shift students' mindsets and help them become career-ready. One of the approaches that can be used to help students develop career-ready competencies is the students-as-partners approach. In 2023, the faculty staff members launched the C.A.R.E.E.R Compass movement, which should help students to become more Collaborative, Agentic, Response-able, Engaged and Employment Ready (C.A.R.E.E.R). This SaP project

focuses on helping students combine their academic work with career success. The following hypotheses were formed before launching the project.

- Students taking part in the C.A.R.E.E.R Compass project throughout reflective practices should be able to form their ePortfolio.
- The C.A.R.E.E.R Compass movement should help students build their professional identity and make their learning personally meaningful.
- The program participants should be able to work within resourceful, respectful, safe spaces for conversations (RRSSC). This safe environment should support students in building their belonging and self-efficacy and increase their engagement.

The C.A.R.E.E.R Compass pilot program was delivered in 2023 during the spring semester. 30 EOI applications were received. Eight C.A.R.E.E.R Compass Champions were selected. All the selected students were enrolled in different courses in FEIT.

Each week students held a group meeting. The meetings were organised to encourage RRSSC. Every week students discussed different topics such as student engagement, self-efficacy and motivation, professional identity building, etc. The C.A.R.E.E.R Compass champions had a chance to use ePortfolio during this project. This tool was used to encourage champions to reflect on their journey. Champions also had a chance to share their ePortfolios as examples to peers/academics. During the first meeting, champions were introduced to the concept of cultural shift and learned about project objectives, scope, and planned outcomes. The initial ePortfolio activity was focused on setting goals and intentions for the semester, encouraging champions to review the provided course materials and think about how they relate to their career plans and personal values. Reflection number two acted as a midpoint check-in, reflecting on the progress, sharing and discussing issues, and readjusting plans for the rest of the semester. The final meeting acted both as a feedback and co-design session. The final week's reflection was focused on discussing future plans, encouraging champions to assess the skills portfolio they developed during the project and think about how they can showcase their skills to future employers and how they plan to apply the learned skills in their course and future careers. The reflection activities were completed during weeks one, six, and twelve.

C.A.R.E.E.R Compass Project Overview

Kickstarting in February 2024, the inaugural C.A.R.E.E.R Compass executive leadership team has organised community meet-ups weekly for the undergraduate and postgraduate students at Faculty of Engineering & IT (FEIT) at UTS. In order to attract students, a Pizza meet-up every three weeks is organised within the semester. During these meetings, the team introduces students to the Portfolium tool, having a casual networking session to build a sense of belonging and community, and support them to create their own professional portfolio.

In the beginning of the semester, the team recorded a high number of students signing up to these meet-ups - with food being the main factor on students' arrival. As the project continues, a lot of students have said that: "I came for the pizza and stayed for the Portfolium", which says a lot about the success of the project in the last few semesters.

Regarding the core student leadership team - the C.A.R.E.E.R Compass Execs have been utilising the Portfolium tool to create their portfolios. Additionally, they have been sending aspects from their portfolios along with a resume to employers, seeking placement for an internship or potential graduate roles. It is crucial to note that all participants in the C.A.R.E.E.R Compass program who engaged in the program's activities actively utilised the Portfolium tool. Only those participants who did not complete the program due to graduation exhibited limited engagement with the Portfolium tool.

When the C.A.R.E.E.R Compass Project kickstarted, the primary communication method was limited, mainly involving eight C.A.R.E.E.R Compass champions and the Project Founder and faculty sponsor. Therefore, Teams channel and chat were utilised to schedule meetings, discussions, and further tasks. As the momentum grows, it is expected that more stakeholders

will be involved, in addition to the increase in interest of the public general (undergraduate and postgraduate students). With this in mind, the C.A.R.E.E.R Compass Execs core team have proposed a rebranding, with close attention to creating a sustainable communication method (see the Figure 1).

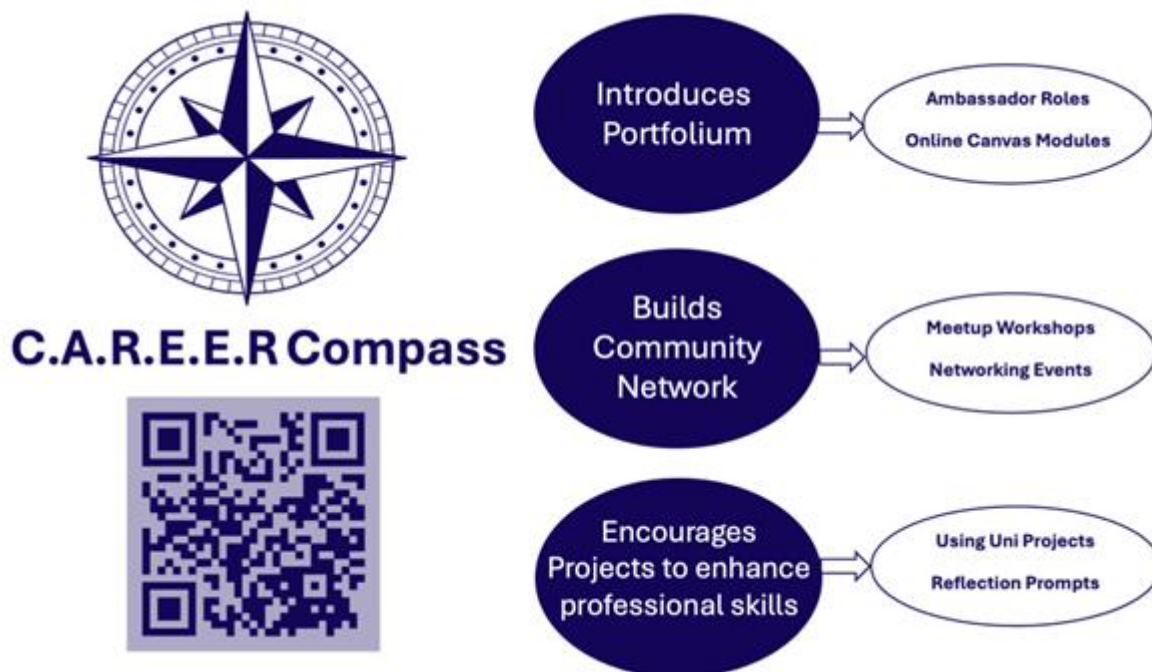


Figure 1: C.A.R.E.E.R Compass logo

Program coordinators' intentions at the beginning of the program

At the beginning of the project, the main goals of the program coordinators were to create an environment for the formation of partnerships and to present a reflection tool ePortfolio to students. There was an intention to support professional identity building through bridging the gap between university and careers from the word go. This should be done through encouraging students to build an ePortfolio, used to show the value of their assignments and extracurricular activities at university to potential employers. The process of creating an ePortfolio helps students actively think about the skills they are developing and about the professional identity they want to show to the world. The ePortfolio is built in Canvas Portfolium and belongs to the student; therefore, it is not marked by academics. According to Eliot and Turns (2011), portfolio activities may positively impact the development process of professional identity. This is because portfolio activities provide opportunities for the sense-making process. Ibarra (2004) suggests that sense-making when students weigh the demands and requirements of a professional role against their own interests is an essential element of a professional identity development process. Ibarra (2004) adds that sense-making should include writings of personal narratives and reflections on the self-discovery process and solidification of personal and professional goals.

Creating spaces for Respectful, Resourceful, Safe Space for Conversations, RRSSC, is critical for students to gather and grow in self-efficacy. Self-efficacy is a subjective judgement of one's ability to successfully perform a specific task. (Bandura, 1977). Macakova and Wood (2022) add that this phenomenon might be shaped by environmental influences through learning. To create the RRSSC environment the gradual release of responsibility approach was used. This was Adapted by Student Voice Australia (2019), which leads students from being informed and modelled learning to taking control and independent learning (see the figure 1). The RRSSC will hold space for students to come together, discuss any issues they are having and connect with one another. It will facilitate cross cohort network building, with younger year students being able

to ask later year students questions about any issues they're having (e.g. with timetabling), while being mutually beneficial to students who are further along in their degree as it gives them an opportunity to give back and see how far they have come. Each week will have a different conversation topic, relating to the relevant point in the semester and this will help facilitate discussion between students who may not know each other. This will be the beating heart of C.A.R.E.E.R Compass, creating a physical community for students in which they feel belonging. This could be done in partnership with relevant student societies to leverage existing networks and support a student-centred and student-led environment.

Students' perspective on the future sustainability of the project

The progression of C.A.R.E.E.R Compass over the next four years sees the movement develop to the rest of the FEIT student-body cohort. In order to achieve this large scale, a long term strategy must be implemented to be able to grow and sustain such a community. This strategy will have to be implemented in two parts, firstly, creating a transfer of knowledge system whereby the executive team can continue to hold workshops and reach out to alumni for networking events. Secondly, having a strategy to grow the student participants' vision from an "opt-in" perspective into an "opt-out" perspective. These steps will be critical in embedding a sustainable long term plan to continue producing a successful C.A.R.E.E.R Compass outcome where a cultural mindset shift at UTS can occur for the entire FEIT cohort.

1. Transfer of knowledge to new recruits

The first stage of creating a sustainable, long-term future for C.A.R.E.E.R Compass is established on having key student members to organise community meetups and outreach events. As the program piloted in 2023 with 8 students chosen out of a list of 30, these students formed the initial executive team that organised meetups. However in 2024, the team decreased to 3 students as the others had graduated becoming UTS alumni. In the second half of 2024, growing the executive committee based on the previous applicants for the pilot program was discussed. This was the ideal scenario as these students had shown an understanding and passion for the initial vision of supporting ePortfolios and promoting a UTS student mindset and attitude shift toward a professional engineering or IT identity right from year one. For the next four years as students on the C.A.R.E.E.R Compass executive team continue to graduate, there will be a system to recruit new students that are passionate about growing this vision. Additionally, in order to foster a comfortable environment where students are able to learn about the management of external outreach as well as running the internal UTS C.A.R.E.E.R Compass meetups, there will be a two week settlement period. During this time new recruits will complete mandatory Canvas modules and join the previous team members in running sessions or reaching out to external stakeholders.

2. Growing C.A.R.E.E.R Compass to go from an opt-in to an opt-out system

- By having a canvas module accessible to every FEIT student

Based on the recommendations report completed in 2023 by the pilot program, one of the main outcomes of C.A.R.E.E.R Compass would be to create a canvas module that was accessible to all FEIT students. This canvas module would include information about accessing Portfolio, reflection writing prompts (3-Prompt Reflection Model) as well as a project identification tool to find skills which students can include in their personal portfolios. By spending time in creating these online modules, it will be a major asset in the future sustainability of C.A.R.E.E.R Compass as students will no longer have to solely rely on the real life community meetups for Portfolio information.

- By including more academic staff studio coordinators

As an addition to the previous point of producing an online, accessible canvas module, future sustainability of C.A.R.E.E.R Compass will include spreading awareness of the program to academic staff. At UTS, there are currently multiple FEIT subjects that require the process of

writing personal reflections. Inherently, C.A.R.E.E.R Compass closely relates to this matter and has the opportunity to act as a beneficial source for students. Therefore, in the next few years, the executive team will begin and maintain contact with academic staff, encouraging them to reference C.A.R.E.E.R Compass during these tasks as well as introducing the mindset and attitude shift early to first year students.

In UTS Orientation week, we plan to run C.A.R.E.E.R Compass workshop where all students enrolled in Engineering CORE subject, Introduction to Engineering Projects (IEP) and all students enrolled in IT Core subject, Communication Information Technology Projects (CITP) will be invited to register their personal/professional C.A.R.E.E.R Compass Portfolio led by the C.A.R.E.E.R Compass Exec team: student culture shift led by students for students with students.

Even though the Portfolium tool is C.A.R.E.E.R Compass's bread and butter, there is room for technical improvement for this tool:

1. Profile strength analysis

As the core team develops their portfolio, it is frequently mentioned that the strength analysis is inaccurate - as it requires users to follow a specific pattern to be considered as a "Pro" - "Champion," and other rankings. Given that C.A.R.E.E.R Compass aims to help students showcase their strengths and uni's class projects, this systematic analysis might create confusion, forcing students to follow a specific template, which goes against the purpose of C.A.R.E.E.R Compass.

2. Complicated layout

At the moment, Portfolium divides its site into different categories: Introduction, Work Experience, Courses, Clubs and Certifications. They would need to be on a different page to add the projects. Furthermore, a category can include multiple projects - these, to an extent, create complications while creating a portfolio, as users have limited personalisation to their portfolios. This results in difficulties in navigating the page.

3. Limited UI/UX

While the Portfolium tool has the option for users to export their portfolios to a PDF file for further usage, it is recorded that the file turned out to be unorganised and unusable without the need to manually edit it. While this is a minor inconvenience compared to other issues, it requires extra time and effort for students to have an impressive portfolio.

Program coordinators intentions to build a long-term program for a cultural shift

What we understand about learning keeps growing in the world that is continually changing. All the work we do impacts directly and indirectly on the student experience.

Want to have long term sustainable projects with impact, that is, making a positive difference. Interaction and relationships with people are a large aspect of a student journey.

At the core of this university-wide initiative is student success: a student achieving academic and personal goals through their university study. Its aim is to shift our focus to long-term programs of work with coordinated oversight that are rigorously evaluated to lead to consistent improvement of the student experience at UTS. As a result of university-wide incorporating feedback in 2023, this framework has evolved (Figure 2) so that the themes are more visibly interconnected. Repositioning Academic Engagement as directly supporting Student Success, sustained by the three foundational elements of Wellbeing, Belonging and Partnerships. And it is this focus that is at the heart of C.A.R.E.E.R Compass.

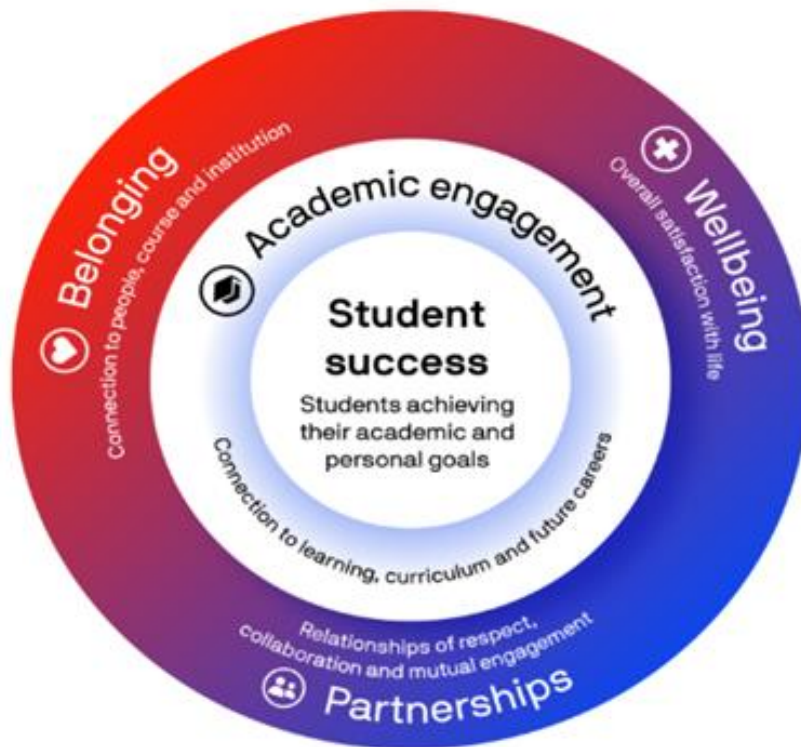


Figure 2: UTS Student Experience Framework

The introduction of the C.A.R.E.E.R Compass movement within FEIT, heralds a transformative shift in educational paradigms, with a focus on cultivating Collaborative, Agentic, Responsive, Engaged, and Employment Ready (C.A.R.E.E.R) students. This innovative initiative is a response to the imperative for a design-centric curriculum and the adoption of the Curriculum and Assessment Learning Framework (CALF), introduced in 2022, which advocates for a comprehensive approach aligned with accreditation standards to foster holistic student development. Departing from conventional grading systems, the C.A.R.E.E.R Compass movement champions a Performance Level methodology that prioritises feedback and reflection to nurture a progressive mindset among students, aiming to bridge the gap between academic theory and practical work experiences, thereby empowering students to proactively navigate their educational journey towards professional readiness.

At the heart of the C.A.R.E.E.R Compass movement lies a vibrant community comprising C.A.R.E.E.R Compass Champions/Execs (culture shift leaders), academic staff, UTS support services, and student societies, collectively nurturing an environment of collaboration and support. Regular social gatherings and discussions centred on C.A.R.E.E.R Compass-related themes, including the individual personal/professional Portfolio and reflection prompts featuring guest speakers from alumni and industry, serve to foster a sense of belonging and engagement within the community. C.A.R.E.E.R Compass instils lifelong learning skills in students by emphasising the importance of continuous professional development, adaptability, and resilience in the face of evolving industry demands. By equipping students with the mindset and skills necessary to navigate dynamic career landscapes, C.A.R.E.E.R Compass prepares them for lifelong learning journeys, career transitions, and ongoing success at FEIT.

Considering the delivery program experience and the faculty's strategic vision, the following activities are proposed to ensure program sustainability:

- **Increase Participants' Engagement:** The aim is to increase the current number of participants involved in the project, including both students and academics. To achieve increased *student* participation, the current C.A.R.E.E.R Compass Champions are running a series of promotional events across the faculty. These events will encompass both formal presentations and informal activities. The informal activities are social events to build a sense of community, such as, a recent sausage sizzle registered 70 new members in just two hours. They have set up a Teams site where newly registered C.A.R.E.E.R Compass members will find a thriving community including information such as, schedule of events, social meetups and technical portfolio information sessions. Academics are increasingly being involved by sharing the C.A.R.E.E.R Compass events on their Canvas subject announcements page and tutors will promote the events to encourage students to close the gap between the academic assessment tasks and connected professional capabilities. Alumni are invited to the information meetups and more formal course type workshops. These are students who actively and with agency collaborated with peers and industry to enhance their professional skills through their degree. They are keen to promote the C.A.R.E.E.R Compass portfolio and community approach to learning. The faculty is looking at embedding the C.A.R.E.E.R Compass initiative into the WIL subjects before and after internships.
- **Secure Additional Funding:** To support the program's implementation, it is planned to seek additional funding. The C.A.R.E.E.R Compass program is now included in the faculty strategic plan hence we propose the C.A.R.E.E.R Compass Champions are employed on a casual contract as C.A.R.E.E.R Compass Ambassadors. The idea is the faculty grows its ambassadors – FEIT has iAmbassadors, Student Ambassadors, WIEIT Ambassadors and hence we propose C.A.R.E.E.R Compass Ambassadors. In this way, we will be able to recruit more students to help lead this significant student culture shift.
- **Foster a Collaborative Faculty Culture:** A key component of sustaining this program is to cultivate a faculty culture where students feel valued as equal contributors to faculty development. To facilitate this environment, students have recently been given the autonomy to lead their own projects by providing C.A.R.E.E.R Compass Champions with staff email accounts and enabling direct communication with staff and peers.

Conclusion

This innovative pedagogy paper presents the students' narrative about their experiences participating in the C.A.R.E.E.R Compass program, which is based on the students-as-partners approach. The students' narrative is supported by input from program coordinators to provide readers with a comprehensive view of the project. Engineering educators can use the practices described in this paper to foster cultural shifts. Additionally, the narrative can serve as a resource for understanding the practices involved in creating student-as-partners programs.

References

- Bandura, A. (1997) Self-efficacy: Toward a Unifying Theory of Behavioural Change *Psychological Review* Vol. 84, No. 2, pp.191-215
- Eliot, M. and Turns, J. (2011) "Constructing professional portfolios: Sense-making and professional identity development for engineering undergraduates," *Journal of Engineering Education*, vol. 100, no. 4, pp. 630-654.
- Healey, R. L., & France, D. (2024). 'Every partnership [... is] an emotional experience': towards a model of partnership support for addressing the emotional challenges of student-staff partnerships. *Teaching in Higher Education*, 29(2), 657-675.
- Healey, M., Flint, A., & Harrington, K. (2014). *Students as partners in learning and teaching in higher education*. York: Higher Education Academy
- Ibarra, H. (2004) "Becoming yourself: Identity, networks, and the dynamics of role transition," in *Academy of Management Annual Meeting*, Seattle, WA.

Macakova, V., & Wood, C. (2022). What shapes academic self-efficacy? In M. S. Khine & T. Nielsen (Eds.), *Academic self-efficacy in education: Nature, assessment, and research* (pp. 99–109). Springer Nature Singapore Pte Ltd.

Matthews, K. E., Cook-Sather, A., & Healey, M. (2018). Connecting learning, teaching, and research through student–staff partnerships: Toward universities as egalitarian learning communities.

Mercer-Mapstone, L., Dvorakova, S. L., Matthews, K. E., Abbot, S., Cheng, B., Felten, P., ... & Swaim, K. (2017). A systematic literature review of students as partners in higher education. *International Journal for Students as Partners*.

UTS Student Experience Framework (2024) Professor Kylie Readman (Deputy Vice-Chancellor, Education & Students), Sydney, Australia

Cook-Sather, A., Bovill, C. and Felten, P (2014) Engaging students as partners in learning and teaching: a guide for faculty Publisher: Jossey Bass

Copyright statement

Copyright © 2024 Beata Francis, Aleksandr Litvinov, Anh Nguyen, Sophie L. Vuillemin and Ella, M. Chegwiddden: The authors assign to the Australasian Association for Engineering Education (AAEE) and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to AAEE to publish this document in full on the World Wide Web (prime sites and mirrors), on Memory Sticks, and in printed form within the AAEE 2024 proceedings. Any other usage is prohibited without the express permission of the authors.