

FINAL REPORT — Vice Chancellor's Gender Equity Fund 2025

Making the Invisible Visible

How Service & Engagement is Understood, Classified, Valued, and Assessed in the College of Science & Engineering — and What It Means for Equity

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Executive Summary

This report presents findings from the 2025 Vice Chancellor's Gender Equity Fund project, *Making the Invisible Visible*, which examined how academic staff and Academic Group Heads (AGHs) in the College of Science and Engineering (CSE) understand, classify, value, and assess Service and Engagement (S&E) work — and what this means for equity in workload recognition and promotion.

Two instruments were used: an anonymous academic staff survey (47 respondents; 19% response rate) and qualitative interviews with all seven AGHs within CSE, conducted by McShane and Radke. Project design was led by Higgle, Paley, McShane, and Radke. Data collection and analyses were led by Green under the supervision of McShane. Full data tables and supporting evidence are provided in the Appendix.

The study's central message is that S&E — one of the three components of every academic's work profile — is the least clearly defined, the least consistently measured, and the least well recognised of the three. These are institution-wide problems that affect all academics, and this report's primary recommendations address them as such. They are not, however, equity neutral. The study found that the kind of S&E work academics do varies along gender lines, and that the forms more often undertaken by women carry less recognition and less promotion value. As such, weaknesses in how S&E is defined and rewarded translate into equity consequences that bear disproportionately on women and others carrying less visible service loads.

Four structural findings:

- **There is no shared understanding of what S&E is.** Around half of respondents defined S&E in line with JCU's institutional framing (contributions that benefit JCU, the discipline, and/or the community); and approximately half defined it residually as anything that is not teaching or research.
- **This ambiguity causes administrative and operational work to be misclassified as S&E.** Respondents commonly listed staff meetings, paperwork, mandatory training, and committee correspondence as S&E, obscuring both the true cost of teaching and research and the nature of genuine service.
- **The promotion system rewards the type of S&E undertaken, not the effort it requires.** Research-adjacent service (external committees, industry engagement, leadership) carries clearer promotion value than teaching-adjacent service (coordination, Work Integrated Learning (WIL), accreditation, etc). Academic Group Heads identified this directly, and noted it falls along gender lines.

- **S&E is valued locally but perceived as undervalued institutionally.** Staff and AGHs see S&E as essential at the group and college level, but believe its long-horizon, relational value is poorly captured by the university's shorter-cycle performance metrics.

The equity dimension runs through each finding. Women were more likely than men to describe their S&E time as difficult to quantify, were concentrated in lower-promotion-currency teaching-adjacent roles, and were the only respondents to volunteer that S&E is at once “important” and “rewarding” yet also “time-consuming” and “not valued.”

This was a pilot study, and its sample is not representative: a 19% response rate, with significant differences in survey awareness across the College, means the gender-specific comparisons in particular cannot be reliably interpreted. This is itself an important lesson, and the strongest argument for a properly resourced, university-wide follow-up study. The structural findings above, which rest on the full sample rather than on smaller subgroup comparisons, are robust to these limitations.

Key recommendations:

1. Establish a shared, accessible institutional definition of S&E;
2. Develop PDP and promotion rubrics that assess S&E on a performance-relative-to-opportunity (ROPE) basis;
3. Explicitly recognise the leadership value of teaching-adjacent service; and
4. Commission a university-wide quantitative study using the validated instruments developed here.

Background and Project Rationale

Academic roles at JCU are divided across three components: Research, Teaching, and Service & Engagement. Of the three, S&E is by far the least defined and the least quantified. While some service roles offer visible leadership, much S&E work is dispersed, untracked, and unrecognised in performance and promotion processes — despite being essential to the institution's functioning.

The invisibility of S&E work is not evenly borne. A substantial literature shows that women in academia perform more service than their male colleagues (Guarino & Borden, 2017), are more likely to be penalised for declining it (Sczesny et al., 2018), and are more often channelled into teaching-focused service that carries lower promotion value than research-adjacent equivalents. These dynamics compound for carers, early-career researchers, part-time staff, and academics from underrepresented groups.

The Vice Chancellor's Gender Equity Fund supported this project to investigate how the College of Science & Engineering academics and their line managers (Academic Group Heads) understand, undertake, and value S&E, and to generate evidence for fairer recognition of that work in workload planning, performance development, and promotion — initially within the CSE, and ultimately across JCU.

The project was led by Assoc. Prof. Megan Higgie (co-Associate Dean of Equity, Diversity, Inclusion and Belonging for CSE; GEAR team member), in collaboration with Dr Allison Paley (co-Associate Dean of Equity, Diversity, Inclusion and Belonging for CSE), Assoc. Prof. Connor

McShane (senior psychological scientist in the College of Healthcare Sciences; Associate Dean of Research for CHS; GEAR team member), and Dr Helena Radke (social psychologist in CHS), and Dr Madison Green as Research Assistant.

This report frames its findings as institution-wide matters of definition, measurement, and recognition, with the gender-equity implications drawn out within each. This framing reflects both what the data most robustly support and the project team's view that durable equity gains depend on fixing the underlying structures that currently make S&E invisible for everyone.

Literature Review

Service work is essential to the functioning of universities, yet a substantial body of research shows it is unevenly distributed and consistently under-recognised. Large-scale studies, show that women in academia perform more service than men (Guarino and Borden 2017). This work, while often essential to securing research funding (for example, ARC expectations) and maintaining teaching quality (for example, QILT metrics), remains undervalued in performance and promotion processes. Despite its centrality to university operations, service work is frequently under-recognised and under-rewarded — especially when it is less visible or not formally acknowledged as leadership — and that this can impede career progression, particularly for mid-career women in STEM (Armani et al. (2021). Inequitable labour distribution, coupled with limited leadership pathways, constrained advancement for women at the associate professor level, reinforcing the need for retention and promotion strategies through to Levels D and E (Hart 2016).

The burden of uncredited service is magnified for underrepresented academics. Equity, diversity and inclusion initiatives, for example, are disproportionately led by women and people of colour (Baez, 2000; Miller et al., 2019). Carers and early-career researchers frequently report that their service contributions are not taken seriously, contributing to disillusionment and attrition. Gendered negotiation strategies around service differ — women tend to comply, while men are more likely to defer or negotiate (Järvinen et al. 2024) — and women are penalised for declining service roles because of gendered expectations around agreeableness (Sczesny et al. 2018). Service is often framed as a passion project with no clear boundaries, and requests frequently come from senior colleagues, which complicates refusal. As such, the default strategy of simply declining is ineffective in a culture where refusal can carry reputational cost.

Several reforms have been proposed to address these challenges (for example, Misra et al., 2011; Babcock et al., 2022; Radina et al., 2023). These include service audits, clearer evaluation criteria, equitable workload allocation, formal recognition of service leadership, and strategies that allow staff to decline service without penalty. Integrating service more explicitly with teaching and research, improving transparency, and leveraging tools such as academic activity dashboards (O'Meara et al., 2020) can also help make service more visible and more fairly valued.

While the literature is growing, concrete institutional responses remain limited — positioning JCU to lead the sector by implementing practical, evidence-based solutions. This project was designed as a first step toward that goal within the College of Science & Engineering.

Methods and Participation

The project used a mixed-methods design with two instruments, kept separate to protect confidentiality and to allow comparison between academics and their line-manager perspectives.

Academic staff survey

An anonymous online survey (via Qualtrics) was distributed to all CSE academic staff, excluding casuals and adjuncts, via the ‘cse-academics’ mailing list, in mid-September 2025 and closed at the end of October 2025. It combined closed and open-ended questions on workload profile, the meaning and definition of S&E, activities undertaken, perceived value (to self, supervisor, and university), and assessment in PDPs and promotion. Of approximately 250 eligible staff, 47 responded (19%): 21 men, 24 women, and 2 who preferred not to specify. The sample skews toward continuing, full-time, and more senior staff; Level A (2% response rate), fixed-term, and part-time academics (each ~7%) are substantially underrepresented (see Table 2 and Appendix Table A1). As discussed under Learnings, awareness of the survey also varied considerably across the College. These features materially limit how far this sample can be generalised and especially constrain subgroup comparisons.

Table 2. Selected response rates by group. Full detail is in Appendix Table A1.

Group	Responded / Population	Response rate
Women	24 / 107	22%
Men	21 / 143	15%
Continuing	40 / 152	26%
Fixed-term	7 / 98	7%
Full-time	40 / 202	20%
Part-time	4 / 60	7%
Level A	1 / 41	2%
Level C	17 / 64	27%
All respondents	47 / 250	19%

To protect anonymity, survey responses were de-identified and analysed at whole-of-College level; where reported, gender and level analyses use broad bands (senior: Levels D–E; early-to-mid: Levels A–C). Ethics approval was granted by the JCU Human Research Ethics Committee (Approval No. 25H-0332).

Academic Group Head interviews

All seven CSE Academic Group Heads participated in individual qualitative interviews conducted by McShane and Radke, exploring how they define S&E, distribute service roles, assess S&E in PDPs, and view its relationship to promotion. Interviews were analysed thematically. Because the AGH interviews achieved a complete census of the seven heads and surface consistent themes, they carry particular evidentiary weight in this report. A curated set of quotes, organised by theme, is provided in Appendix B.

Key Findings

The four findings below are presented as structural features of how S&E operates at JCU. Within each, the equity consequences are drawn out. The findings are ordered from the most fundamental — what S&E is taken to mean — through to how it is rewarded and valued.

Finding 1 — There is no shared understanding of what S&E is

The most basic finding of this study is that CSE academics do not agree on what S&E is. Roughly half of respondents described it in terms consistent with JCU's institutional framing: contributions that benefit JCU, the discipline, or the wider community. S&E was also commonly defined residually as whatever remains once teaching and research are accounted for, captured in phrases such as “anything that isn't teaching or research” (Appendix Table A8).

This is not a semantic quibble. S&E is one of the three pillars of every workload profile and a formal criterion for promotion. If half the academic body understands it as a positive category of contribution and/or as a residual catch-all, then the same workload percentage and the same promotion criterion mean different things to different people. AGH interviews confirmed that the boundaries are genuinely unclear, including the internal distinction between “service” and “engagement”:

“We're not very good at separating service and engagement, but service, I think most people view it as internal uni stuff and engagement most people view as stuff you do with people outside, even if it's really servicey.”

Equity lens: when a category is ill-defined, its boundaries are negotiated informally — and informal negotiation tends to disadvantage those with less positional power or less inclination to decline requests. A shared, explicit definition is a precondition for equitable distribution and recognition.

Finding 2 — Administrative and operational work is being misclassified as S&E

A direct consequence of the residual definition is that work that is really part of teaching and research — or simply general operational activity — is logged in academics' minds as S&E. Across both the meaning/definition and activities questions, respondents of both genders and all levels listed attending staff meetings, VC forums, processing delegations and travel paperwork, curriculum administration, mandatory WHS training, and committee email correspondence as their S&E contributions (Appendix Tables A8–A9).

The same difficulty shows up in how staff account for their S&E time. About half of respondents who answered the question said the time they spend on S&E varies week to week or is simply hard to quantify, and this was more pronounced for women (approximately two-thirds) than for men (approximately half) (Appendix Table A7). When a category is this hard to define, it is correspondingly hard to measure, which undermines the workload data that planning and equity monitoring depend on.

This matters institutionally for two reasons. First, it inflates the apparent volume of S&E while hiding the true administrative cost of teaching and research, distorting the workload data on which planning depends. Second, it makes genuine, outward-facing service harder to see amid the operational noise. AGH interviews echoed the difficulty, including the absence of any clear or codified boundary:

“There's a component of teaching and research which is service to the university... I don't think we define it that way in any way that's clear... research service and administration is not codified anywhere that I can tell.”

Equity lens: misclassification obscures who is actually carrying outward-facing and coordination service. Where that work is gendered (see Finding 3), burying it inside a catch-all S&E category renders the imbalance invisible to workload and promotion processes.

Finding 3 — The promotion system rewards the type of S&E, not the effort it requires

Both staff and AGHs identified that different kinds of S&E carry markedly different promotion value. Research-adjacent service — external committees, industry and government engagement, centre leadership — is more visible and more rewarded in promotion than teaching-adjacent service such as course and major coordination, accreditation, and Work-Integrated Learning. The clearest articulation came from the AGH interviews, which as a complete census of the seven heads are the strongest evidence in the study for this point:

“I don't necessarily see that it's gendered in that women and men do less or more than each other. Just the roles are very different... Research is going to get you promoted higher faster, that's well known... which is incredibly problematic because that is where the gender impact lies, and that's the women tending to do the learning and teaching roles and the men do the research roles.”

One AGH connected this directly to the principle of recognising contributions relative to opportunity — the idea that an academic with a small service allocation cannot reasonably be expected to demonstrate the same service leadership as one given a major role:

“Everything should be relative to opportunity. So if you have a 0.1 service commitment and all of a sudden the university says ‘you haven't shown leadership in your service’... well, I wasn't really given an opportunity if I only had five or ten percent service.”

The survey activity data are consistent with a gendered pattern — women reported more course coordination, WIL, and outreach organising; men reported more CSE-committee and some research-adjacent roles — but the subgroup counts are small and noisy, and we treat them as suggestive only (Appendix Table A9). The weight of evidence for this finding rests on the AGH census, not the survey subgroups. Some early-to-mid career women also reported being told that S&E “probably doesn't have impact” or is “less valuable than securing funding” — messaging that, whatever its intent, reinforces the disadvantage of being concentrated in lower-currency service.

The interviews also showed that Academic Group Heads are not passive in this: several described concerted efforts to distribute roles equitably, including by gender. One noted their group had “fairly equal gender balance,” and the gendered pattern they observed lay in the kind of roles undertaken rather than their number. At the same time, heads described a dynamic that can entrench uneven loads — some staff are simply “better corporate citizens” who volunteer readily, while others are quietly passed over:

“You get a few staff doing most of the service and a couple that could be doing more, but people think, ‘no, no, they're not gonna do it properly.’ So it's just gonna be a mess.”

Equity lens: if promotion rewards the type of service rather than the effort or leadership it demands, and if service types are gendered in their distribution, then a nominally neutral promotion process produces systematically gendered outcomes. A performance-relative-to-opportunity (ROPE) standard is the most direct way to address this inequity; and strategic planning for service and engagement at the Academic Group level — with gender and other equity demographics in mind — should be an institutional priority going forward.

Finding 4 — S&E is valued locally but perceived as undervalued institutionally

Staff and AGHs consistently described S&E as essential at the Academic Group and College level — the “foundational work” that enables teaching and research, builds JCU's profile, and connects the university to community and industry — while perceiving that the University as an institution does not value it to the same degree. Several AGHs attributed this to a mismatch between the long-horizon, relational nature of S&E and the shorter-cycle, quantifiable metrics the institution tends to reward:

“Service and engagement is really hard to measure in quantities, even though as a human being I feel the qualities... University — they want to see short-term, more quantitative things... that's why I guess we value more teaching and research rather than service and engagement.”

Others described a straightforward information gap — a sense that senior leadership simply does not have visibility of what S&E staff actually do, or how long it takes (Appendix B). A number of women also linked the undervaluing of S&E to reductions in Professional and Technical staff support, noting that academics are absorbing administrative and support functions that are neither resourced nor recognised. This points to a resourcing dimension to the equity problem, not only a recognition one.

A related theme that emerged strongly in the interviews was staff overwhelm and burnout. Heads linked the accumulation of unrecognised service — across all levels, not only senior staff — to genuine wellbeing and sustainability concerns. One described demanding teaching-adjacent coordination roles as “a recipe to burn them out”; another put the systemic pattern starkly:

“All of the senior staff at JCU are doing a hell of a lot of different things, and the same thing is happening at the level of a level B lecturer. They are doing lots of different things just to serve the minimum amount that needs to happen to keep us functioning. That's why we're all overwhelmed and burnt out.”

Equity lens: the affective signature of this undervaluing was gendered. Only women volunteered that S&E is “important,” “rewarding,” and “meaningful” while simultaneously “time-consuming” and “not valued” (Appendix Table A8) — a small but striking signal.

Learnings

This pilot was delivered by an interdisciplinary team and has produced useful findings. It also encountered constraints that are worth noting — both for accountability and because several are themselves substantive lessons about how this kind of research should be designed going forward.

The defining lesson: differential survey awareness

The most important methodological lesson concerns who responded. Awareness of the survey varied substantially across the College: staff with closer proximity to the project's governance and communication channels were aware of it at much higher rates than the general academic population. The result was near-complete response within some senior groups (i.e., the CSE Executive) alongside sparse, self-selected response elsewhere.

This is not a minor caveat. When one subgroup is captured at close to a census while others are represented by a thin, self-selected slice, comparisons between them no longer compare like with like. This directly undermines the gender-based comparisons in particular. An exploratory test of officially assigned S&E fraction by gender did reach significance once Level E was removed¹, but given the awareness bias — and the related fact that respondents skewed toward those with negotiated, higher-than-standard S&E loads — we do not regard this or any of the gender-allocation comparisons as interpretable. We report it transparently rather than rely on it.

A second self-selection effect compounds this: a survey about S&E is most likely to be completed by those who feel most strongly about S&E. The respondents' self-reported official S&E allocations clustered around 0.20 — well above the 0.10 FTE standard — which most likely reflects that those carrying genuine, negotiated S&E loads were the ones motivated to respond, rather than any institution-wide pattern. We therefore treat this gap as a symptom of the sampling, not as a finding.

The clear implication is that any future study must control survey awareness — ensuring uniform, well-supported distribution across all groups — before subgroup comparisons can be trusted. This is one of the strongest arguments for the University-wide study recommended below.

Sampling and response rate

The 19% response rate was lower than desired. The risk assessment had anticipated low engagement and proposed strong College leadership support as mitigation; in practice, the appropriate ethics determination that reminder emails could constitute undue pressure limited the outreach available. This is a legitimate ethics consideration whose effect on response proved larger than anticipated — in a College of around 250 academics, a 19% return was well below what the team had reasonably expected. Engagement had been identified as a risk and mitigated within the ethics constraints; the lesson is that the available mitigations were insufficient, and that future studies should agree a broader set of ethically acceptable engagement strategies from the outset. The resulting sample underrepresents precisely the groups (fixed-term, part-time, early-career) most likely to carry hidden service loads.

Identifiability and data governance

A practical consequence of the realised sample was that direct analysis of de-identified raw data by the CSE-based investigators carried a higher identifiability risk than the project could accept; the CSE-based lead and investigators therefore engaged with the data through aggregated summaries and analyses prepared by the CHS-based investigators rather than

¹The exploratory comparison of officially assigned S&E fraction by gender reached statistical significance only when Level E academics were removed (Mann–Whitney U, $Z = -2.25$, $p = .025$; men's mean 0.21 vs women's 0.17). With all levels included, the difference was a non-significant trend ($p = .068$). For the reasons set out in this section, we do not consider this comparison interpretable.

directly. The same identifiability concerns meant some planned analyses — for example, gender by academic level simultaneously — could not be safely produced. Although these analyses had been planned in advance, it was the uneven composition of the realised sample, in addition to its size, that made some of them unsafe to run. A more evenly distributed response, the central aim of the University-wide study recommended below, would substantially reduce this identifiability risk and allow all investigators to engage with the data directly.

Scope of analysis

Several further analyses were scoped during the project but were not pursued, because the survey sample proved too small and too unevenly distributed to support them meaningfully. These included aggregating S&E activities by academic level to test S&E misclassification, cross-tabulating value perceptions against time spent, and a systematic comparison of survey responses against the interview themes. In each case the relevant subgroups were too sparse for the analysis to yield reliable or interpretable results. These questions remain worthwhile and are best addressed within the University-wide study recommended below, where adequate sample sizes would make them meaningful.

Benefits

Although conceived as a pilot, the project has already delivered tangible benefits to JCU that extend beyond its findings:

- Validated instruments. A tested academic-staff survey and a structured Academic Group Head interview protocol now exist, and with small modification can be deployed at scale, saving substantial design effort in any future study.
- A conceptual framework for S&E. The four-part lens developed here — how S&E is defined, classified, valued, and assessed — gives JCU a clear, reusable structure for thinking about service and engagement across all Colleges.
- A complete AGH evidence base. A full census of the seven CSE Academic Group Heads has produced rich qualitative insight into how service is distributed, valued, and assessed at the point where workload decisions are actually made.
- An evidence-based case for sector-leading reform. The project has identified specific, actionable levers — a shared definition, ROPE-based assessment rubrics, and recognition of teaching-adjacent service — positioning JCU to lead the sector.
- A foundation for the University-wide study. By asking the right questions and demonstrating the design constraints to avoid (for example, having an even survey awareness), the pilot substantially de-risks and accelerates a larger follow-up study.
- Capability building. The project has strengthened cross-College collaboration between the College of Science & Engineering and the College of Healthcare Sciences and built practical research capacity in equity-focused institutional research.

Collectively, these benefits mean that the value of the investment is not contingent on the pilot's sample limitations: the instruments, framework, and evidence base remain assets to JCU regardless, and directly enable the recommendations that follow.

Recommendations

These recommendations follow directly from the findings and are ordered from the most immediately actionable to those requiring longer-term investment.

1. Establish a shared institutional definition of Service & Engagement

JCU need to develop and communicate a clear, accessible definition of Service & Engagement that distinguishes genuine S&E from the administrative overhead of teaching and research, and that clarifies the service/engagement distinction. It should be developed in consultation with academics across levels and profiles and embedded in workload tools, PDP templates, and the promotion framework. This directly addresses Findings 1 and 2.

2. Develop Service & Engagement assessment rubrics on a relative-to-opportunity basis

The PDP and promotion frameworks need to include structured rubrics for S&E that:

- recognise the full range of S&E, including teaching-adjacent coordination, WIL, and community engagement;
- assess contributions relative to the S&E fraction actually allocated (via ROPE), rather than against an implicit benchmark set by those with larger allocations;
- give clear guidance on how S&E should be evidenced in promotion, with explicit recognition that coordination and teaching-adjacent leadership carry genuine value.

This addresses Finding 3 and the relative-to-opportunity (ROPE) principle raised directly by AGHs. Developing such a rubric was a conditional objective of this project; the evidence indicates it is best built at University scale, on the relative-to-opportunity basis described above, rather than retrofitted to a constrained pilot sample.

3. Recognise the leadership value of teaching-adjacent service

JCU should explicitly acknowledge in promotion criteria and guidance that S&E types differ in visibility and profile-building value, and ensure that high-effort, lower-profile service — disproportionately undertaken by women — is assessed on its merits rather than against research-adjacent equivalents.

4. Commission a University-wide Service & Engagement study

The single most important recommendation is to build on this pilot with a quantitative, closed-ended survey deployed across JCU, using the instruments and conceptual framework developed here and — critically — with uniform, well-supported distribution to remove the awareness bias that limited this study. A University-wide study would:

- achieve sample sizes adequate to test gender, level, and profile effects with statistical rigour;
- enable comparison across colleges and disciplines;
- establish a baseline against which the impact of any reforms can be measured over time.

5. Resource engagement activities appropriately

AGH interviews surfaced consistent evidence that academics absorb the costs in time, and occasionally in personal funds, of engagement that benefits the university. JCU should review whether resourcing for engagement (travel, preparation, coordination support) matches

institutional expectations, so that the expectation to participate does not fall inequitably on those with less discretionary time.

Acknowledgement

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A P P E N D I X

Supporting Data and Analysis

The tables and quotations in this appendix were prepared by Dr Madison Green from the academic staff survey and from the Academic Group Head (AGH) interviews conducted by Assoc. Prof. Connar McShane and Dr Helena Radke. They provide the full evidentiary basis for the findings in the final report. Survey open-ended items were analysed by content analysis; interview data thematically. Sample sizes vary by item and are noted in each table.

Appendix A — Academic Staff Survey Data

Survey instrument and analysis

The academic staff survey was administered via Qualtrics. It comprised: (i) demographic and work-profile items (gender, academic level, contract type, FTE, time since last promotion, and the officially assigned Teaching/Research/S&E fractions); (ii) closed items on time spent on S&E and how it is valued by the academic, their supervisor, and the University; and (iii) open-ended items on the meaning and definition of S&E, the activities undertaken, and how S&E is assessed in PDPs and promotion.

Closed items were analysed descriptively. Workload-fraction differences by gender were tested using the Mann–Whitney U test (a non-parametric test appropriate given the non-normal distributions; Shapiro–Wilk $p < .01$ for all three fractions), both with and without Level E academics. Open-ended items were analysed by content analysis (coding meaningful words and definitions and quantifying their frequency and presence); interview data were analysed thematically (deriving higher-order themes). To protect anonymity, all responses were de-identified and analysed at whole-of-College level, using broad level bands (senior: Levels D–E; early-to-mid: Levels A–C). The statistical results in Tables A5–A6 are reported for transparency; as set out under Learnings, the differential awareness of the survey across the College means these gender comparisons cannot be reliably interpreted.

Table A1. Respondent demographics (N = 47)

Characteristic	Category	n	%
Gender	Woman	24	51.1
	Man	21	44.7
	Prefer not to say	2	4.3
Contract	Continuing	40	85.1
	Fixed-term	7	14.9
Occupancy	Full-time	40	85.1
	Part-time	4	8.5
	Missing	3	6.4
First Nations heritage	Yes (Aboriginal and/or Torres Strait Islander)	0	0
	Yes (other First Nations)	2	4.3

Characteristic	Category	n	%
First Nations heritage	No	42	89.4
	Prefer not to say	3	6.4

Source: Preliminary survey analysis (Green). Percentages of N = 47.

Table A2. Academic level

Academic level	n
Level A	1
Level B	9
Level C	17
Level D	7
Level E	10
Missing	3

Source: Preliminary survey analysis (Green). Level reported by 44 of 47 respondents.

Table A3. Time since last promotion

Time since promotion	n
0–2 years	12
3–5 years	15
6–10 years	3
10+ years	5
N/A	9

Table A4. Median reported official academic profile, by gender

Gender	Teaching	Research	S&E	n
Men	40% (0–85)	40% (0–70)	20% (10–100)	21
Women	40% (0–50)	40% (10–100)	16.5% (0–80)	22
All respondents	40%	40%	~20% (median)	44

Source: Green. Ranges in parentheses. Note: self-reported official S&E fractions sit above the 0.10 FTE standard; see Learnings for why this most likely reflects response self-selection rather than an institution-wide pattern. Median profile reported by 44 respondents (gender split totals reflect the 43 who gave both gender and profile).

Table A5. Officially assigned workload fractions, by gender (descriptive statistics)

Component / sample	Group	n	Mean	Median	SD	Min	Max
Teaching (all levels)	Men	21	0.33	0.40	0.18	0.00	0.85
	Women	22	0.34	0.40	0.18	0.00	0.50
Research (all levels)	Men	21	0.41	0.40	0.18	0.00	0.70
	Women	22	0.43	0.40	0.18	0.10	1.00

Component / sample	Group	n	Mean	Median	SD	Min	Max
S&E (all levels)	Men	21	0.26	0.20	0.18	0.00	1.00
	Women	22	0.17	0.165	0.21	0.00	0.70
S&E (Level E removed)	Men	14	0.21	0.20	0.07	0.11	0.40
	Women	19	0.17	0.15	0.17	0.00	0.70

Source: Green. Officially assigned workload fractions (0–1) self-reported by respondents. Two respondents who preferred not to state gender are omitted from the gender split. Note: self-reported S&E fractions sit above the 0.10 FTE standard, most likely reflecting response self-selection (see Learnings). These descriptive differences are not interpretable as population estimates given the sampling (see Table A6 note).

Table A6. Mann–Whitney U tests of workload fraction by gender

Component	Sample	Mann–Whitney U	Z	Asymp. Sig. (2-tailed)
Teaching	All levels (n=43)	205.0	–0.66	0.511
Research	All levels (n=43)	195.0	–0.94	0.347
S&E	All levels (n=43)	158.5	–1.82	0.068
Teaching	Level E removed (n=33)	124.0	–0.34	0.735
Research	Level E removed (n=33)	125.5	–0.30	0.765
S&E	Level E removed (n=33)	75.0	–2.25	0.025

Source: Green. Grouping variable: gender (respondents who preferred not to say omitted). The S&E difference reaches significance only with Level E removed ($p = .025$). As detailed under Learnings, this result is NOT interpretable: differential survey awareness produced near-complete response in some senior groups and sparse, self-selected response elsewhere, so the groups are not comparable. The result is reported here solely for transparency.

Table A7. Reported time spent on S&E per week, by gender

Reported time	Men	Women
Varies / difficult to quantify	7	10
More than allocated	1	1
Half day	1	4
1–2 days	9	4
2–3 days	1	1
20+ hours	1	2
Did not answer	2	1

Source: Green. Some respondents counted twice where they gave both a ‘varies’ response and an estimate. Approximately two-thirds of women vs half of men reported time as variable or hard to quantify.

Table A8. S&E meanings and definitions — selected content-analysis categories

Counts are the number of respondents whose open-ended answer was coded to each category, across the “what does S&E mean to you” and “how would you define S&E” items (N = 32). Categories are not mutually exclusive. Only women volunteered the affective descriptors in the final block.

Category	Men	Women
Benefits/promotes JCU (incl. student retention)	7	13
Activities which benefit the discipline	7	10
Activities which benefit the community ('greater good')	6	7
Contributions outside of T&R	6	7
'Anything not T&R' (catch-all)	4	7
External committees (e.g. government)	7	3
Internal committees (discipline, college, JCU)	5	4
Operations / admin not related to R&T	5	3
'Important' (affective — women only)	0	3
'Time-consuming' (affective — women only)	0	2
'Not valued' (affective — women only)	0	2
'Meaningful / rewarding' (affective — women only)	0	3

Source: Green, content analysis (N = 32; the respondent who preferred not to state gender is omitted from the gender split). Counts pooled across the meaning and definition items.

Table A9. Reported S&E activities undertaken, by gender

Activity	Men	Women
Other marketing / media	9	9
Academic review (papers, grants, HDR, editorial)	8	8
External committees (government, industry)	7	8
Course coordination / accreditation / WIL	6	9
CSE committees	9	5
JCU committees	5	7
Community engagement	7	5
Outreach — open days	7	4
Outreach — schools	6	3
Outreach — general	1	4
Facilitating department activities (seminars, PD)	5	6
Executive / leadership	6	4
Mentor role	4	1
General admin (committee email, VC forums, staff meetings)	5	4

Source: Green (N = 32). Subgroup counts are small; gender patterns are suggestive only and are not relied upon as findings (see main report, Finding 3).

Table A10. How S&E is assessed in promotion applications — selected responses

Response	Men	Women
N/A — has not gone for promotion	3	3
Unsure	2	3
Not adequately considered	2	1
Difficult to gather evidence / not well tracked / unseen	1	2
No option to document / quantify these contributions	2	0
Assessed as part of leadership & impact / advancing JCU mission	0	2
Some S&E better regarded / better suits narrative	1	1
Messaging received: S&E not well regarded	0	1
Generally less valuable than research (e.g. funding)	0	1

Source: Green, content analysis (N = 28). Categories not mutually exclusive.

Appendix B — Academic Group Heads Interview Quotes by Theme

All seven CSE Academic Group Heads participated. Interviews were conducted by McShane and Radke, and analysed by Green. Quotes are lightly edited for readability; minor disfluencies removed. Speaker identifiers are withheld to protect anonymity given the small number of Academic Heads.

Interview structure and analysis

All seven CSE Academic Group Heads (AGHs) participated in individual semi-structured interviews conducted by McShane and Radke. The interview schedule covered five domains: (i) how AGHs define S&E and distinguish service from engagement; (ii) the activities they and their staff undertake; (iii) how they distribute S&E roles within their group; (iv) how they mentor and assess S&E contributions in Performance Development Plans (PDPs); and (v) how they perceive the relationship between S&E and promotion. Interviews were analysed thematically. Because the interviews achieved a complete census of the seven heads and surfaced highly consistent themes, they carry particular evidentiary weight. Quotes below are organised by theme and lightly edited for readability; speaker identifiers are withheld to protect anonymity.

Defining S&E and the service/engagement boundary

“For me, it's activities that academics engage in that are not directly related to teaching or research and that serve the academic group, the college or the university at a broader level.”

“We're not very good at separating service and engagement, but service, I think most people view it as internal uni stuff and engagement most people view as stuff you do with people outside, even if it's really servicey.”

“There's a component of teaching and research which is service to the university... I don't think we define it that way in any way that's clear... research service and administration is not codified anywhere that I can tell.”

Distributing service roles and tracking time

“So you can fix the allocation of the time spent on the day, but the preparation ahead of time is, yeah, complex.”

“You quantify what is your service role... so that's how we do it, with packages, but it's very hard to keep track of the hours.”

“Some people are just better corporate citizens. They're more willing to sacrifice their time... so you get a few staff doing most of the service and a couple that could be doing more.”

Gendered patterns in service type

“I don't necessarily see that it's gendered in that women and men do less or more than each other. Just the roles are very different. Men do research, men do

industry and innovation. Women do teaching and learning, engagement... the issue [is] around the quality and the nature of those service roles.”

“Research is going to get you promoted higher faster, that's well known... which is incredibly problematic because that is where the gender impact lies, and that's the women attending to do the learning and teaching roles and the men do the research roles.”

Distributing roles and unrecognised sub-tasks

AGHs described allocating S&E by considering the staff member's whole package of activities, their availability and suitability, and — where possible — aligning roles with individual interests and career aspirations through PDP discussions. Several noted recurring sub-tasks that are expected but not formally recognised, such as reporting committee outcomes back to the group:

“So in addition to the participation of activities, I would expect that the staff as well, in undertaking those roles perform the necessary functions - and that's going to differ depending upon what role that might be - so this is the communication of matters of relevance to those committees through the communication channels of our academic group, be that our fortnightly academic group meetings, the minutes associated with that and any other necessary communication like e-mail and so on.”

Academic Heads also observed that some discipline-specific and volunteer professional service goes unrecognised, and that engagement activities of clear value to the University are sometimes not resourced — including an instance where staff were asked to attend a workshop but not funded to travel:

“They're OK with using their service and engagement time for activities like that. They see the value of it for the University and the discipline and the college... [but they] shouldn't have to [pay from personal funds].”

Value, recognition, and the institutional mismatch

“I just think there's a disconnect. The highest levels of university leadership don't actually know what service and engagement academic staff are doing... I don't think they have that information anywhere.”

“Service and engagement is really hard to measure in quantities, even though as a human being I feel the qualities... university — they want to see short-term, more quantitative things.”

“A lot of these service functions are about connecting our teaching staff to the community, which is an important marketing tool to get students into our programs... incredibly important functions for the university.”

Promotion and relative to opportunity

“The new promotion criteria, it seems to be more prominent that recognition for service is considered, but it's certainly not going to compete with publications and research profile... sadly.”

“Everything should be relative to opportunity. So if you have a 0.1 service commitment and all of a sudden the university says ‘you haven't shown leadership in your service’... well, I wasn't really given an opportunity if I only had five or ten percent service.”