PACE Evaluation Project

Executive Summary

The Professional and Community Engagement (PACE) program is a university-wide work integrated learning (WIL) program that was initiated at Macquarie University in 2008, as part of a fundamental overhaul of Macquarie’s undergraduate curriculum. Underpinned by principles of reciprocity and collaboration, PACE’s strategic vision is to connect all undergraduate students, partners and University staff in mutually beneficial learning and relationships that contribute to social impact and innovation.

The PACE Evaluation aimed to assess the impact of the program for students, partners, the University, and the community more broadly, as well as support quality assurance for program improvement and development. The report is structured around five high level evaluation questions:

1. How much did the PACE program do?
2. How effectively is PACE being implemented?
3. What are the critical program components and barriers?
4. To what extent does PACE contribute to outcomes for students, partners, the University, and the wider community?
5. Who benefits most from PACE and in what circumstances?

A multiphase, mixed methods approach was used to generate knowledge about not only whether PACE is effective, but also explain the reasons why, explore any contextual factors that may be influencing program success, and identify areas to enhance the PACE program.

This report includes PACE program data (2016-2018), the PACE Student Survey (Session 2 2017-Session 3 2018/19), Partner Survey (Session 2 2018, Session 1/2 2019), PACE Staff Workshops and interviews (Session 2 2018-Session 1 2019), Graduate Outcomes Surveys (2016-2018) and purposeful case studies (2018). The primary audience for this report is internal stakeholders at Macquarie University. However, given the scale of the project, the evaluation design and implementation may also be of interest to the wider WIL community.

Evaluation Question 1: How much did the PACE program do?

The institution-wide implementation of the PACE program is unprecedented in the Australian university WIL context. Program data from 2016-2018 demonstrates that the PACE program is providing the scope, scale and diversity of experiences required to support all students to undertake a professional experience as part of their undergraduate degree. From 2016-2018 there were 22,669 enrolments into the PACE program, with data suggesting that a relatively large proportion of students (42%) enrol in more than one PACE unit over the course of their degree. Overall, 4,972 unique PACE activities were undertaken, including 294 PACE International activities. The largest proportion of PACE students undertook University-based placements (44%), followed by internships (29%).
Evaluation Question 2: How effectively is PACE being implemented?

There is clear evidence that PACE plays an important role in providing undergraduates with discipline-related professional experiences and that students and partners are highly satisfied with the PACE program and their overall experience.

Although professional and community engagement processes varied across the program, within Faculties and even within PACE units, there was strong evidence that PACE activities were being implemented effectively in terms of partnership development, PACE activity design, allocation, induction, preparation and supervision/partner contact.

PACE units and activities are being undertaken within an academically rigorous framework to develop the capacity and capabilities of students. PACE units are providing students with opportunities to apply theory to practice in a professional setting, whilst being provided with academic support.

PROGRAM EXPERIENCE

Excelling  Program relevance

There is clear evidence that the PACE program is relevant, from the perspective of students, partners and University stakeholders. Most students had previous work experience; however, only 35 per cent had done most or all their professional experiences in an area of professional interest. The most important goals for students when undertaking PACE were to gain professional experience, skills or knowledge (87%), sharpen analytical skills (84%), and to develop and/or apply discipline specific knowledge or skills (83%). Partners' motivations for participating in PACE were to gain support for organisational projects, build connections with Macquarie University and access discipline knowledge and/or expertise.

Strong  Student and partner satisfaction

There is strong evidence that students and partners were highly satisfied with PACE. Students agreed that is was valuable to do PACE as part of their degree (87%) and that PACE had enhanced their experience at Macquarie University (70%). However, a small proportion of students (14%) were either unsatisfied with PACE or did not value the experience. The majority of these students were an internal enrolment, did not find their own activity, did the activity as part of a group, and completed a large PACE unit. Partners were also satisfied with the outcomes achieved by the students (93%) and the majority of partners agreed that they would recommend engaging with a PACE student (93%).

Excelling  Program support

PACE is excelling in terms of providing personalised and bespoke program support to students and partners. Students who had contact with the PACE team reported that the support was helpful, particularly in terms of explaining the program, providing emotional support, accessing information about unit requirements, and applying for PACE activities (e.g. resumes and interviews).

Reasonable  Monitoring

There is some evidence that PACE teams and unit convenors were monitoring PACE activities, however in most cases it occurred reactively. There were also limited resources and a lack of clarity about who was responsible for the ongoing monitoring of PACE activities. This is an area that needs improvement.
There is strong evidence that PACE is providing students and partners with timely and effective information about PACE. The majority of students and partners agreed that processes and systems were easy to use. However, limited access to central marketing support and student management information, and difficulties with student systems/enrolment timeframes provide ongoing challenges.

PROFESSIONAL AND COMMUNITY ENGAGEMENT

There is strong evidence that PACE has effectively sourced, developed and managed a wide range of partnerships to provide students with high-quality PACE activities. Sourcing and developing partnerships based on reciprocity required significant time and in many cases was ‘invisible’ work, which could be limited by other challenges, such as external systems and administration.

There is strong evidence that the PACE activity design and allocation process is generating a range of professional opportunities for all undergraduate students. Overall, 80 per cent of students reported that PACE provided them with an opportunity to develop discipline specific knowledge/skills, reflective practice, an ability to work as a team member, awareness of ethical principles, as well as to gain professional experience and make a positive contribution to the community. The majority of students also agreed (80%) that there was an opportunity for them to apply the skills, knowledge or theories they had learnt at university. However, almost a third of students did not agree that their PACE activity was in an area of professional interest. The majority of partners (>85%) agreed that the process for connecting with students was simple, that the PACE activity was achievable in the time frame, that the activity had clear goals/tasks, and that they understood the activity’s connection with the student’s university studies.

There is strong evidence that PACE effectively prepares students and partners for PACE activities. Most students reported that they received an induction (78%) and that it had prepared them well (68%). Most students (78%) also agreed that the partner organisation was prepared for their PACE activity. The most common suggestions for preparation improvements from students related to having clearer information about activity objectives, roles and responsibilities.

Partners agreed that students were prepared for the activity (84%). They also agreed to a moderate or great extent that students had the required knowledge and skills (93%) and were motivated to engage and learn (94%).

PACE is excelling in terms of student supervision and/or partner contact. Students agreed they had received adequate support from their supervisor (85%) and that their supervisor made constructive suggestions for improving their work (79%). Partners reported that they had provided students with regular feedback (88%) and the investment of time was worthwhile (88%).
LEARNING AND TEACHING

Strong Learner experience of PACE

There is strong evidence that students regard the learning and teaching in PACE units highly. In response to the items which are a Learning and Teaching Unit Evaluation requirement at Macquarie University, 8 out of 10 items were rated in the highest category (≥4 out of 5). Accordingly, 89 per cent of students agreed they would recommend the PACE unit to other students. The lowest rated items were the reflection component of the unit and the debriefing (both 3.8 out of 5). Students provided several suggestions for unit improvements in regard to assessments, unit content being aligned to the PACE activity and/or discipline and improving unit workload.

Excelling Academic support

PACE is excelling in terms of academic support. Eighty-seven percent of students agreed that the academic staff were helpful. Students also commented that they appreciated the support provided by unit convenors and tutors; quite a few noted it to be the best they had received at University.

Evaluation Question 3: What are the critical program components and barriers?

The evaluation findings identified the following critical program components:

- **PACE processes** such as partner preparation, activity matching, induction, and learning and teaching. These have a significant impact on students’ overall experience and their perception of the impact of PACE on their employability, career readiness and citizenship.

- **Faculty-based PACE teams** with central support to provide personalised and bespoke support to students, partners and unit convenors. The central team focuses on programmatic processes and systems.

- **Professional experience embedded in curriculum** to provide students with an opportunity to apply theory to practice supported by a rigorous academic framework.

- **Recognition of the workload** for unit convenors and PACE teams. This workload includes convening a PACE unit, establishing partnerships and developing PACE activities.

- **Faculty integration** to ensure relevance across disciplines and Faculties. Critical aspects of Faculty integration were ongoing discussions and collaborations across the different Faculty levels, promotion of the benefits of the program, engagement of non-PACE staff to champion the program, and PACE unit convenors being engaged in the program. However, integration into daily Faculty operations is an ongoing process and several barriers were also identified.

- **Leadership and governance** to embed PACE within Faculties and the broader University environment. However, the program structure also contributed to barriers in terms the accountability and quality assurance of PACE units. For example, although Senate-endorsed criteria for PACE units provide a quality framework for approving PACE units, the PACE program lacks official oversight or authority over the way in which PACE units are delivered.

The main barriers to program implementation, all of which were outside the immediate scope of the PACE program, were the need for:

- **A University-wide coordinated approach** to professional practice and employability initiatives, which are embedded throughout an undergraduate degree. Questions were raised about how PACE’s role and the role of other areas of the University in terms of student employability, professional skill development and accountability for graduate employment outcomes could be better coordinated.

- **A coordinated strategic approach to partnership management** across the University to capitalise on the strong partnership base that PACE has established and provide students with ongoing professional opportunities, as well as build research and corporate engagement/collaborations.
• **Reconfiguration of resources** to reduce program costs, while continuing to provide high-quality experiences to students and partners.

• **Co-ordinated communications and systems.** As PACE is a University-wide program linked to degree programming, communication needs to be coordinated across different parts of the University and beyond PACE teams in order to promote PACE, increase student awareness of the PACE program, and ensure that there is consistent messaging across the University.

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**Evaluation Question 4: To what extent does PACE contribute to outcomes for students, partners, the University, and the wider community?**

Overall, there is strong evidence that PACE is positively contributing to outcomes for students, partners, the University and the wider community.

### Strong Career readiness

There is strong evidence that PACE is having a positive impact on students’ career readiness, with statistically significant increases in professional practice and commencement confidence. Students also agreed that PACE had improved their employability (77%). At the end of PACE students rated their professional practice competencies highly. For example, 95 per cent reported that their ability to communicate appropriately with people from different levels of management and their ability to take responsibility and be accountable for professional practice, actions and decisions was good or very good. However, they were least confident that they would be able to obtain work relevant to their studies (63% quite/very confident).

Four months after course completion, graduates reported that PACE had helped them (very much, a lot or somewhat) to plan or make decisions about their career (69%) and feel more confident seeking work (65%), and that PACE had contributed to their ability to get a satisfying job in an area of professional interest (63%). Twelve months after course completion, graduates reported (a lot, moderately, or a little) that PACE had helped them to plan or make decisions about their career (78%), feel more confident seeking work (74%), and that PACE had contributed to their ability to get a satisfying job in an area of professional interest (70%). Given the short-term nature of the PACE program – one compulsory unit completed as part of a 3-5 year undergraduate degree – it is positive to see that a large majority of students rated the impact of PACE positively, both four and twelve months after course completion.

The majority of partners reported that students were, to a moderate or great extent, ready to commence in their field/disciple (86%). The vast majority also agreed that PACE had helped to prepare the student/s for their future transition to graduate employment (91%).
**Strong Professional networks**

There is strong evidence that PACE is enhancing students’ professional networks with statistically significant increases in job seeking confidence, including professional networks. However, compared to other professional skill domains, at the end of PACE a smaller proportion of students agreed that they felt confident using their professional network to seek work (68%) or that they were actively using their professional networks (65%). At the end of PACE, 61 per cent of students and graduates agreed that PACE had enhanced their networks.

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**Excelling Active citizenship**

PACE is having a substantial impact on students’ citizenship with statistically significant increases in their citizenship competencies, such as their ability to evaluate their personal practices and their ability to address social, environmental or sustainability issues in their field of study or profession. At the end of PACE students were most confident in this domain with over 80 per cent of students agreeing with each citizenship item. A high proportion of students also reported that PACE had provided them with opportunities to develop their citizenship competencies. In turn, students’ rating of the overall impact of PACE on their citizenship competencies was slightly higher than that of career readiness competencies.

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**Strong Graduate employment**

There is strong evidence that PACE is having a positive impact on graduate employment. From 2016-2018 graduates who completed PACE were significantly more likely to be in full-time employment (PACE 76%, non-PACE 67%), in their first full-time job (PACE 76%, non-PACE 26%) and in overall employment (PACE 88%, non-PACE 85%) four months after course completion, compared to graduates who had not completed a PACE unit. Twelve months after course completion PACE graduates were also significantly more likely to be in full-time employment (PACE 86%, non-PACE 77%) and overall employment (PACE 95%, non-PACE 90%) from 2016-2018.

In some case students were directly employed by their PACE partner (13% at the end of PACE, 7% four months after course completion and 10% twelve months after course completion). Whilst not all organisations had the capacity to directly employ students, many partners were committed to providing ongoing professional support, mentoring and networking opportunities to the students they had hosted. Twelve months after course completion PACE graduates were also significantly more likely than non-PACE graduates to report that their employment was related to their degree (PACE 67%, non-PACE 42%) and that their qualification had prepared them for employment (PACE 68%, non-PACE 49%) from 2016-2018.

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**Strong Partner and community outcomes**

There is strong evidence that PACE is contributing to mutually beneficial outcomes for partners and the community more broadly. Partners reported to a great or moderate extent that students were supporting key projects (84%) and producing a range of tangible outputs. Students were also providing critical support to community organisations and working directly with local communities. Partners also reported to a great or moderate extent that PACE had provided them with an opportunity to make a positive community impact (85%), to give back to the industry/profession (81%) and to engage with the university sector (80%). To a lesser extent partners reported that access to current disciplinary or professional knowledge (57%), professional development opportunities for the supervisor (55%), and access to potential future employees (64%) were a benefit of the PACE program.

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**Strong University outcomes**

There is strong evidence that PACE is contributing to widespread outcomes for the University. Macquarie University is seen as a leader in the WIL sector, and PACE as a differentiator that has increased its profile and reputation. Other reported benefits for the University included increasing academic/staff engagement in the University, and student engagement in their studies. PACE is seen as a unique interface which connects University, industry and community. This has had multiple benefits and great potential in terms of student recruitment, research collaborations and corporate partnerships.
Evaluation Question 5: Who benefits most from PACE and in what circumstances?

At an aggregate level, students reported positive changes in their professional practice, commencement confidence, job seeking and active citizenship. However, there were a number of differences in student self-reported outcomes and satisfaction when comparing student groups and different types of PACE experiences:

- The magnitude of outcome changes (comparing student's reflection of their competencies at the start of PACE to the end of PACE) in terms of Professional Practice, Commencement Confidence, Active Citizenship and Job Seeking was significantly greater for students who completed a PACE internship compared to students who did a University-based placement. At the end of PACE, students who did a PACE internship also rated themselves more highly across all outcome domains compared to students who did a University-based placement. This means that students who completed a PACE internship reported the greatest changes as a result of PACE and were also more confident in their capabilities at the end of the program.

- PACE students who did an internship also rated the Impact on Active Citizenship, Impact on Career Readiness, Student Satisfaction and employability item/s significantly higher that students who did a university-based placement. There were no differences between these two groups, however, in students’ rating of the of PACE unit.

- Students who completed a small PACE unit (<40 enrolments) reported significantly greater outcome changes in terms of Job Seeking compared to students who completed a large unit. Student who completed a small PACE unit also rated the Student Satisfaction and Learner Experience of PACE items significantly higher, as well as Impact on Career Readiness, Impact on Citizenship and Employability.

- At the end of PACE, students who did a PACE International activity rated the Professional Practice and Active Citizenship items significantly higher than students who did not, as well as the Impact on Career Readiness, Employability and Student Satisfaction item/s. However, students who did not do a PACE International Activity rated the Learner Experience of PACE items significantly higher than PACE International students.

- At the end of PACE, domestic students rated the Professional Practice and Active Citizenship items significantly higher than international students.

- At the end of PACE, students with a high GPA rated the Commencement Readiness items significantly higher than students with a medium GPA.

- At the end of PACE, students who had previous work experience rated the Job Seeking and Active Citizenship items significantly higher than students who had no previous work experience.

- Students who were not mature age reported significantly greater changes in Commencement Readiness and Professional Practice compared to mature age students.

In terms of employment outcomes, there were several differences in full-time graduate employment trends when comparing PACE experiences and groups, as well as with the non-PACE cohort. The most substantial of these is that graduates who did multiple PACE units were significantly more likely to be in full-time employment four months after course completion (83%) compared to students who did one PACE unit (72%), as well as the non-PACE cohort (67%). Graduates who did multiple PACE units were also significantly more likely to be in full-time employment twelve months after course completion (90%) compared to students who did one PACE unit (83%), as well as the non-PACE cohort (77%).

For the aggregate 2016-2018 period a higher proportion of graduates with a disability, graduates from Non-English-Speaking Backgrounds, graduates from low socio-economic status backgrounds, and international graduates who did a PACE unit were in full-time employment compared to the respective non-PACE cohorts. Lastly, although a higher proportion of graduates who did a PACE internship were in full-time employment compared to those who did University-based placements, the differences were not statistically significant. Therefore, whilst the type of PACE activity had a significant impact on student reported outcomes, the results suggest that these differences did not impact graduate employment outcomes. However, graduates who had either PACE experience (internship or university-based placements) were significantly more likely to be in full-time employment compared to the non-PACE cohort for the 2016-2018 period.
Conclusion and Recommendations

The institution-wide implementation of the PACE program is unprecedented in the Australian university WIL context. This report provides evidence that PACE is having a substantial impact on student/graduate outcomes and engagement, which is a significant result for the University. A key strength of the program is its established long-term partnerships with industry and community, which has multiple benefits and great potential for the broader University.

The following recommendations have been developed from the evaluation findings. Aligned with the collaborative evaluation approach, they are intentionally broad so they can be discussed and refined by PACE and University stakeholders.

RECOMMENDATIONS FOR PACE PROGRAM DELIVERY

1. Develop strategies to further increase students’ career readiness and professional networks, including opportunities for students to undertake a PACE activity in an area of professional interest, connecting students with a supervisor/mentor in the same disciplinary area and greater alignment of unit content to the PACE activity and/or discipline.

2. Continue to provide a range of PACE activities, including local, regional and international, to sustain the growth of the program. Strategies to increase internship opportunities, which are having a particularly positive impact on student reported outcomes and experience, should be explored.

3. Continue to work closely with partners to ensure that PACE activities provide mutually beneficial outcomes for partner organisations, students and the community more broadly.

4. Develop strategies and/or resources to better prepare students and partners for their PACE experience, including developing PACE activities with clear objectives, roles and responsibilities. Opportunities for students to connect with past PACE students could provide another layer of support. Student preparation also involves other areas of the University, such as the Careers and Employment Service in many PACE units, and this should be broadened and strengthened.

5. Establish proactive monitoring processes for PACE activities, including clarifying expectations, roles and responsibilities for each party (unit convenors, PACE staff, students and partners).

6. Establish consistent and regular unit review processes to support quality assurance of PACE units. Unit reviews should involve the relevant PACE stakeholders and be incorporated into existing Faculty/University processes. This includes ensuring that activity sourcing, activity/unit workload, reflection and debriefing processes, induction and unit size are considered. When relevant exploring ways to enhance the connection between PACE International activities and the curriculum, learning and teaching within PACE units should also be considered, as well as mechanisms to further support students who undertake research activities with external partners.

7. Consider mechanisms to ensure that all student groups are benefiting from the PACE program, specifically external students, student who completed a large PACE unit, mature age students, international students and students who had no previous work/professional experiences.

BROADER RECOMMENDATIONS

8. Promote and leverage the outcomes of the PACE program as a differentiator for Macquarie University in regard to student recruitment, as well as strengthening the University’s reputation in the wider community.

9. Develop a University-wide coordinated approach to professional practice and employability which builds upon the success of the PACE program. This should include opportunities for students to develop their professional capabilities and undertake work-integrated and practice-based learning experiences throughout their undergraduate degree.

10. Develop a University-wide strategic approach to industry and community partnerships. This should recognise the workload and resources required to build sustainable relationships based on reciprocity and seek to leverage PACE partnerships for the purposes of corporate engagement, multidisciplinary partnerships and research collaborations.

11. Coordinate University communication, systems and processes to increase student awareness of the PACE program, ensure students know early in their degree that PACE is a requirement and enrol early in PACE units.

12. Support the continued integration of PACE within Faculties to ensure that the program is relevant across disciplines, efficiently delivered at scale, and sustainable into the future. This includes the recognition of workload associated with delivering PACE units and where possible the involvement and engagement of a wide variety of academics.
LESSONS FOR EVALUATING WORK-INTTEGRATED LEARNING PROGRAMS

The PACE Evaluation has provided a unique opportunity to examine the processes and outcomes of a university-wide work-integrated learning (WIL) program. The following recommendations have been developed to support future WIL evaluations.

13. **Collaboration, commitment and buy-in is key.** Involving multiple and diverse academic and professional stakeholders at all stages of evaluation design and implementation is critical to ensure that there is ongoing engagement and buy-in for the evaluation, and commitment to using the evaluation findings for program improvement.

14. **Develop a program Theory of Change and evaluation criteria.** Have a clear understanding of the context (program and university), purpose of the evaluation, nature of the program, the program components being evaluated, and how success, impact and quality is defined and measured, before determining the methods.

15. **Measure program processes and outcomes.** This is necessary to not only generate knowledge about program effectiveness, but also explain the reasons why, explore any contextual factors that may be influencing program success, and identify areas for program enhancement.

16. **Prioritise evaluation objectives and questions.** Be realistic about the resources required to design and implement a formal program evaluation and prioritise evaluation objectives and questions to ensure that data collection is manageable and sustainable.

17. **Use a mixed method design.** This is vital to capture data from students, partners, and University stakeholders and can be a useful strategy to engage different stakeholders. For example, complement quantitative metrics on graduate employment outcomes with rich and detailed stories of impact collected through qualitative methods.

18. **Provide timely access to data to support ongoing quality assurance.** Utilising analytic tools such as dashboards can provide near real time access to data. This provides multiple benefits and supports a learning culture whereby program stakeholders continuously use evaluation data to inform practice and make decisions to improve program effectiveness and implementation.

19. **Embed data collection within university systems, program processes and/or learning and teaching.** This is important to ensure that data collection is sustainable and not seen as an add-on to program delivery. It can also be a useful strategy for engaging stakeholders and enhancing curriculum.