ENHANCING RESILIENCE

Final report of
2017 ATN
Learning and
Teaching Grant

Building graduate resilience for the disrupted future of the 21st Century

Project Team

Curtin University: Dr Margo Brewer (project lead), Michelle Donaldson (project manager), Brooke Sanderson, Sonia Ferns, Alan Reubenson, Associate Professor Sharon Maresse and Sandie Pritchard (administrative assistant).

Queensland University of Technology: Dr Sue Barnard (university lead), Bernadine Cooper, Dr Murray Lane, Professor Fiona Naumann and Dr Caroline Rueckert.

University of South Australia: Dr Gisela Van Kessel (university lead).

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Research assistants:

Alice Carter (Curtin University), Millie Watson and Sarah Edney, (University of South Australia), and Omar Abdelrahman (QUT).

External evaluator:

Dr Helen Flavell, Coordinator Scholarship Learning and Teaching, Faculty of Health Sciences, Curtin University

Expert reference group:

Professor Ian Shochet, School of Psychology and Counselling, Faculty of Health, QUT

Nigel Gribble, Lecturer, School of Occupational Therapy, Social Work and Speech Pathology Curtin University

Michelle Rogers, Director, Student Experience, Support Services, Curtin University

Dr Keri Moore, Clinical Education Specialist

Associate Professor Susan Beltman, Deputy Head of School, School of Education, Curtin University

Dr Gillian Hatt, Student Engagement Coordinator, Support Services, Curtin University

Dr Julie Howell, Associate Director, Careers Employment Leadership, Office of DVC Academic, Curtin University

Dylan Heywood and Joran Piggott, Curtin Student Representatives

Evangeline Fenech and Ali Dulfika, QUT Student Representatives

Ellen Messenger and Isobel Waters, UniSA Student Representatives

Other project contributors:

Mick Tate, Cartoonist

Andrew Reid and Andrew Taylor, Graphic Design and Website Development

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Key team members at Curtin University include Mandy Miller, the project's instructional designer, and Sandie Pritchard, who provided excellent administrative support.

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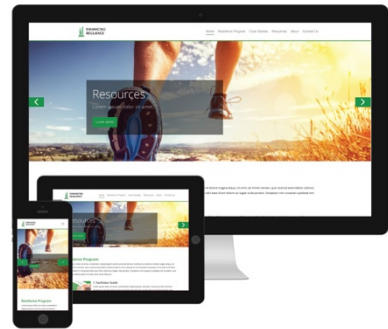
Achievement statement

Building graduate resilience for the disrupted future of the 21st century

About

Led by Curtin University, in partnership with Queensland University of Technology and the University of South Australia, this project ran from March 2017 to June 2018.

Targeting resilience as an essential employability skill for the 21st century the project focused on designing, implementing and evaluating a professional development program for academic and professional staff. The program adopted a multi-disciplinary approach and included elements from leadership, change management, peer coaching and mentoring.

Designed for broad adoption, the two-day program was piloted with participants from a range of disciplines and areas from the three participating universities. Four core outputs, along with forthcoming publications, have been produced and are available on the project website **enhancingresilience.com**.

Pathway to enhance resilience

Conceptualisation of resilience for higher education → Staff capacity building program with accompanying Facilitator Guide → Set resources to enhance resilience → Framework for embedding resilience within the curriculum
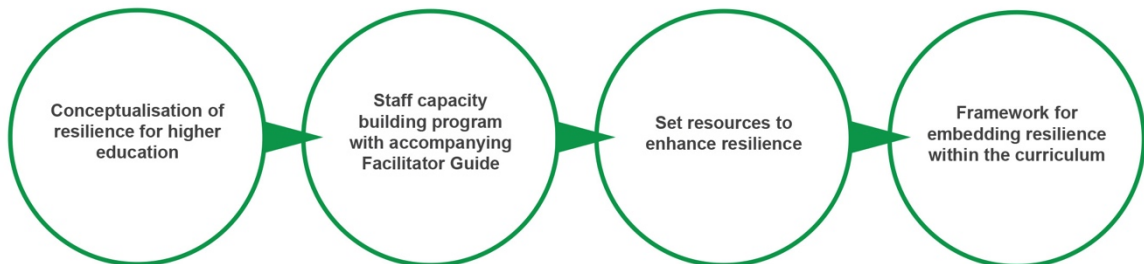
Reviews

All staff program participants agreed that the program was well designed and delivered and provided them with a strong sense of confidence and commitment to leading change—change that enhanced their resilience and that of their students.

"The program provided me with some really nice strategies that I've been able to use in my teaching"

~ PARTICIPANT

"There's a shared understanding within our department around the definition of resilience and how we want to be talking to students about it"

~ PARTICIPANT

Executive summary

Project context

Driven by proposed changes in government funding (Birmingham, 2017) student retention and employability are key issues facing Australian universities. The most common reasons for attrition encompass physical and mental health issues, financial pressures and other personal reasons (Higher Education Standards Panel, 2017). Research has shown between 48 per cent (Leahy et al., 2010) and 84 per cent of Australian university students report all elevated levels of distress (Stallman, 2011) with 60 per cent reporting clinical levels of stress (Stallman, 2016).

Resilience has been shown to reduce psychological distress, assist with managing academic demands, and enhance academic outcomes (Pidgeon, 2014). Resilience is increasingly viewed as a critical skill for success in contemporary work environments where employees need to be able to cope with changes to roles, organisational structures, and strategy on an ongoing basis (EY, 2015; Humburg, van der Velden & Verha, 2013; Ovans, 2015).

Aim of the project

This project aimed to target resilience as an essential employability skill for the 21st Century. A core element of the project was the design, implementation and evaluation of a professional development program for academic and professional staff. This program adopted a multi-disciplinary approach and included elements from leadership, change management, peer coaching and mentoring. The project also aimed to develop a resilience framework that encapsulated a shared understanding of resilience within the higher education context, along with resilience-enhancement resources that could be embedded within curricula or co-curricula experiences to further advance the change process.

Project approach

The project adopted an exploratory multi-site case study underpinned by a mixed-methods approach to answer four research questions: (1) What impact did the capability development program have on the staff who participated? (2) What changes to staff practices were made as a result of participation in the program? (3) What impact did changes in staff practices have on student resilience? (4) Were there any unintended outcomes for either staff or students as a result of the program?

Project outputs, deliverables and resources

The first step in the project was to establish a shared understanding of resilience within higher education, a term with markedly different definitions depending on context. A review of 73 journal papers and several exploratory workshops informed the final conceptualisation of resilience. Informed by this conceptualisation of resilience, an intensive staff development program was created and piloted within a range of disciplines and work areas across the three partner Australian Technology Network (ATN) universities. The program was delivered as a two-day version and a one-and-a-half-day version to test out these options. A total of 82 staff participated in the four pilots. During the program the participants developed an action plan to embed strategies that enhance resilience within

their local context, be that curricula or co-curricula. To support the implementation of these action plans, participants were organised into peer coaching groups and assigned a mentor from the project team. Based on the lessons learned from this program implementation, a number of resources were developed to facilitate delivery of the program beyond the project's lifespan. These resources include all of the program materials, a guide to facilitating the program and a set of curated resources related to enhancing resilience. A framework for enhancing resilience within the higher education curriculum, still in the development phase, will also be added to the project's website which houses all of the aforementioned resources.

Impact of the project

The immediate impact of the project was evident in the number of staff program participants who were able to implement at least part of their action plan to enhance resilience. Some participants decided to lead change at a school or course level. For example, two participants from Occupational Therapy at Curtin University organised for a half-day staff development program for 35 staff employed across all levels of their course. Several of these staff created a community of practice and implemented several changes to the occupational therapy course including explicit scaffolding of challenges across the curriculum to build student resilience. Other participants implemented change at the unit level. For example, one participant from Speech Pathology at Curtin University embedded discussion about the important role of resilience in work-integrated learning and employability along with activities to build student resilience across the final year of their course. Due to restructures at Curtin and QUT, several staff who participated in the program left their university before they were able to implement any changes.

Interest in the project, both nationally and globally, was high as indicated by the 268 people from across Australia, New Zealand, Canada, and Malaysia who registered to participate in a one-hour webinar designed to disseminate the project. Requests were also received from the Australian Cooperative Education Network, the organisers of the Western Australian Teaching and Learning Forum and Occupational Therapy at Curtin University to deliver the staff development program in 2018. As a result, in addition to the webinar participants, an additional 231 staff have participated in an abbreviated version of the program.

Key findings

1. Establishing a shared understanding of the topic, in this case resilience, is a critical first step in the design, implementation and evaluation of a staff development program. It was evident at several forums where the project was presented that academic and industry staff had very diverse understandings of what resilience is and how it can be enhanced.

2. Broad adoption and dissemination of change is facilitated when the leadership (project) team is comprised of representatives from diverse disciplines and areas of work within the target organisation(s).

3. Attracting academic staff to attend professional development is challenging given current workloads and the multitude of competing demands they must juggle. Ensuring support for the staff development program by key executive (e.g. head of school/department/area) is essential to staff engagement.

4. Full participation in the program (attendance on both days) was significantly higher when the program was delivered as two consecutive days rather than two days spread out over a semester.

Project report

Project context

Higher education has undergone unprecedented change in recent years. Flynn and Vredovoog (2010) described twelve trends universities are responding to including the impact of globalisation and technology, increased diversity of the student population, and increased competition for students and resources. Student retention and employability have become key issues for universities, with the Australian government considering linking an element of public funding to institutional performance on student retention, satisfaction and employment (Birmingham, 2017). Attrition rates for Australian universities were 15 per cent in 2015 with the most common reasons for withdrawal being physical or mental health issues, financial pressures and other personal reasons (Higher Education Standards Panel, 2017). This result is not surprising given research has shown that between 48 per cent (Leahy et al., 2010) and 84 per cent of university students have reported elevated levels of distress (Stallman, 2011) and 60 per cent clinical levels of stress (Stallman, 2016).

Resilience has been shown to reduce psychological distress, assist with managing academic demands, and enhance academic outcomes (Pidgeon, 2014). Therefore, it is not surprising resilience is increasingly viewed as a critical skill for success in contemporary work environments where employees need to be able to cope with changes to roles, organisational structures, and strategy on an ongoing basis (EY, 2015; Humburg, van der Velden & Verha, 2013; Ovans, 2015). Some work environments, including health and social care, are particularly challenging. Factors contributing to the challenges of working in health and social care include: dealing with suffering, death and dying; long hours including shift work; violent patients; heavy workloads; bullying and intimidation; poor collaboration with colleagues from the same and other professions; compassion fatigue; and emotional exhaustion (Adamson, Beddoe & Davys, 2014; Kennedy, Kenny & O'Meara, 2015; McDonald, Jackson, Wilkes & Vickers, 2013; Monrouxe, Rees, Dennis & Wells, 2015). The impact of this challenging work context can be seen in concern over attrition rates in speech pathology (Health Workforce Australia, 2014a), physiotherapists (Health Workforce Australia, 2014b), and nurses (Dawson, Stasa, Roche, Homer & Duffield, 2014; Holland, Allen & Cooper, 2012). Career longevity studies have found professional resilience to be the most critical capability (Hodges, Troyan & McKeeley, 2010). Employee health, which has been directly linked to resilience, has become an economic issue in many countries with the replacement cost for staff sick leave in the UK alone estimated at £5 billion per annum (Bevan, 2010).

While resilience was initially viewed as a fixed personality trait or personal attribute, more recently resilience is viewed as a dynamic process that can be developed or enhanced in response to adversity (Eavolino-Ramirez, 2007, Gillespie, Chaboyer & Wallis, 2007; Stephens, 2013). University staff are ideally placed to have a real impact on student skill acquisition and learned behaviours and, ultimately, learning and teaching outcomes (Chalmers et al., 2014; Higher Education Academy, 2012). This project aimed to target resilience as an essential employability skill for the 21st Century. A core element of the project was the design, implementation and evaluation of a professional development program for academic and professional staff. This development program adopted a multi-disciplinary approach and included elements from leadership, change management, peer coaching and mentoring. Designed for broad adoption, the two-day program was piloted

within a range of disciplines, many from health and social care on three occasions. A one-and-a-half-day program was also offered as a forth pilot to compare this option. The project also aimed to develop a resilience framework that encapsulated a shared understanding of resilience within the higher education context, along with resilience enhancement resources that could be embedded within curricula and co-curricula experiences to further advance the change process. Staff who participated in the development program developed an action plan to embed these resources (e.g. strategies and activities) into their teaching context to enhance student resilience. An overview of the project can be seen in Figure 1 below.

Figure 1. Overview of the project
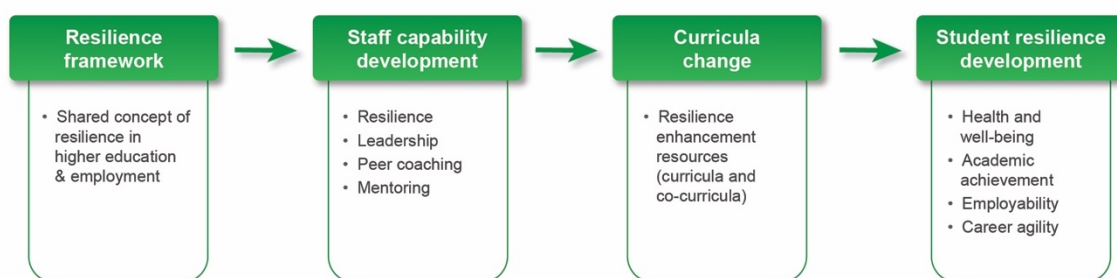
Project approach, including methodology used

The project adopted an exploratory multi-site case study underpinned by a mixed-methods approach to answer the following research questions:

1. What impact did the capability development program have on:
   - staff understanding of resilience and its role in employability for the 21st Century?
   - staff attitude toward resilience and their role in enhancing this?
   - staff members' own resilience?
   - staff leadership knowledge and practices?

2. What changes to staff practices were made as a result of participation in the program, in particular, practices relating to the student learning experience?

3. What impact did changes in staff practices have on student resilience?

4. Were there any unintended outcomes for either staff or students as a result of the program?

Project outputs and findings

Our project provides five core outputs:

1. A shared understanding of resilience in the context of students in higher education informed by a review of 73 journal papers.

2. A program to build staff capacity to embed resilience into curricula and co-curricular elements of the higher education experience with accompanying materials and a guide to facilitating the program.

3. Resources to facilitate sustainable program delivery beyond the project's lifespan.

4. A framework for enhancing resilience within the higher education curriculum.

5. A website to house program resources.

1. Shared understanding of resilience

A shared understanding of a concept, including its role and consequences, is essential to engaging staff to work with students (Choo & Paul, 2013). Resilience is a contested concept. Meredith et al. (2011) found 122 definitions of resilience across 187 documents. Others including Adamson et al. (2014), Aburn, Gott and Hoare (2016) and Kolar (2011) acknowledge that while interest in resilience has grown, the inconsistency in defining this term has resulted in widespread confusion. For the purposes of our project we wished to establish a shared understanding of what resilience is and the critical role it plays in the higher education, current and future work contexts. Our original goal was to identify threshold concepts specific to resilience through a process of dialogue which Cousin (2006) referred to as 'transactional curriculum inquiry'. By engaging the project team and expert reference group members from multiple disciplines and roles in this form of inquiry, we had hoped the critical concepts of resilience could surface and be shaped into a framework. What emerged from our attempts to identify these threshold concepts was a realisation that a concept as broad as resilience does not easily lend itself to specific concepts that are transformative, irreversible, troublesome, integrative and bounded (Meyer & Land, 2003). Instead, we developed a definition of resilience specific to the higher education context. This definition, along with a more detailed conceptualisation of resilience, was presented to a group of approximately 50 health professional educators at the [Australian and New Zealand Association for Health Professional Educators](link) (ANZAHPE) conference in 2017, the peak organisation for practitioners involved in the education and training of health professionals in Australia and New Zealand. Based on feedback obtained during this session our definition was amended as below:

> *Resilience is a dynamic process of positive adaptation in the face of adversity or challenge. This process involves the capacity to negotiate for and draw upon psychological, social, cultural and environmental resources.*

This definition and a more detailed conceptualisation of the resilience process were embedded into the staff development program.

2. Staff development program

Our development program aimed to change staff understanding and practices in relation to resilience and leadership. The program was informed by Boud and Brewer's (2013) and Steinert, Naismith, and Mann's (2012) recommendations for staff development. The overarching learning outcomes for the staff program were to:

- Enhance participants' understanding of resilience and leadership within the higher education context.

- Develop the capacity of participants and students to manage the complexities of the 21st Century workplace through enhancing resilience.

- Develop participants' leadership capabilities to embed resilience enhancement strategies within the curriculum.

- Apply scholarship of learning and teaching to an action plan which targets the embedding resilience for students.

The program was designed to be implemented face-to-face as either a two-day intensive course or as a series of modules. For the purposes of the project, the pilots were delivered in 2017 as a two-day intensive course (on consecutive days) at each of the three universities; Modules one to four were delivered on day one and Modules five and six on day two. A second pilot at Curtin University was conducted to *test* the program in a shortened version (1.5 days) over a semester. The final program has been organised as five separate modules to allow for increased flexibility as seen in Table 1 below. Two elements of the program are offered as optional modules in the final version.

Table 1. Program modules and their aims

Module	Title	Aims
1.	Overview of program and participants	• Understand the program objectives and structure. • Understand the role of the facilitator(s) and participants.
2.	Setting the scene	• Examine the contemporary higher education environments. • Understand the drivers for resilience enhancement in the higher education context.
3.	Conceptualisation of resilience	• Reflect on own conceptualisation of, and experience with, resilience. • Understand historical views of resilience. • Define resilience.
4.	Enhancing resilience	• Critique contemporary resilience intervention research within the higher education context. • Understand key approaches to resilience enhancement within an ecological framework. • Critique resources related (directly or indirectly) to resilience enhancement.
5.	Leadership	• Reflect on own conceptualisation of, and experience with, leadership. • Understand contemporary approaches to leadership within the higher education context. • Consider sustainable change supports including networking, peer coaching and mentoring. • Create an action plan to lead change in your context.
6.(optional)	Scholarly project	• Develop a scholarly project.
7.(optional)	Mindset	• Consider mindset as a factor in enhancing or detracting from resilience.

A Facilitator Guide was developed to accompany the staff program. This guide covers: (1) an introduction and background to the project, (2) the structure and purpose of the guide, (3) how to facilitate the program, (4) how to coordinate/administer the program, (5) the program modules and resources required, and (6) references.

Program participants

A total of 82 staff participated in the four pilot programs conducted between August 2017 and June 2018: Curtin University 47, Queensland University of Technology (QUT) 16, University of South Australia (UniSA) 19. Participants represented a range of faculties, disciplines and support services within the three universities (see Table 2). Health was well represented with 52/82 of the total participants. This was not surprising given the project team had seven members from health-related courses (Speech Pathology, Physiotherapy, Exercise Science, and Medical Radiation Science).

Table 2. Pilot program participants by discipline or work area

Area	Curtin	QUT	Uni SA
Physiotherapy, Exercise Science/Physiology	6		10
Pharmacy, Biomedical science, Public Health	8		
Psychology	1	1	
Occupational Therapy, Social Work, Speech Pathology	12		3
Medical Radiation Science, Sonography	2		1
Nursing, Midwifery, Paramedicine	1	2	4
Education	2	2	
Architecture	2		
Science, Engineering		3	
Economics, Accounting, Finance		1	
Learning and Teaching (central and faculty)	6		1
Careers, Employability, Work Integrated Learning	2	1	
Counselling Service, Student Equity	1	1	
Indigenous Engagement, Tutor Scheme	1	1	
Other (clinical science, research, unknown)		4	

The participants' journey through the program comprised several phases as seen in Figure 2 below. First, a survey was conducted prior to the program to establish baseline measures of participants' own resilience, level of distress and leadership (see page 14 for further details of this evaluation). Second, as outlined above they attended a face-to-face workshop. The design of an action plan for leading change was commenced during the workshop, either individually or as a team (participants from the same course/area).

Figure 2. Key steps in the program participants' journey
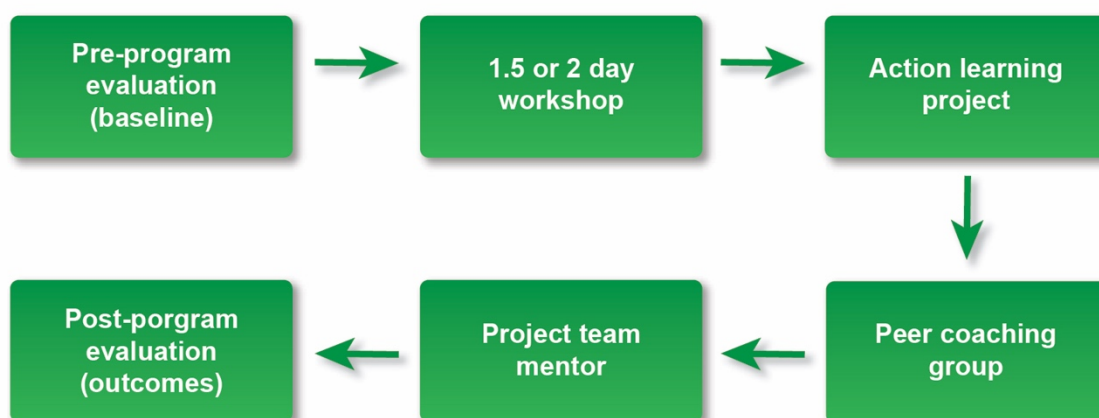
To support the completion and implementation of the project plan all participants were organised into peer coaching groups by the end of the workshop. Participants were advised to schedule three meetings for their group. At the first meeting they established the ground rules for working together (e.g. confidentiality, expectations of each other) and then supported each other to address any issues or challenges that impacted on the implementation of their action learning project. Each group was allocated a mentor from the project team and advised to invite their mentor to the first meeting. All contact after this first meeting with the mentor was to be instigated by the participants, either individually or as a peer coaching group, to gain additional support with implementing their project. The final phase of their journey was the post-program evaluation which re-assessed their resilience, distress, leadership and the impact of the program (see page 14 for evaluation detail).

3. Project resources

A multitude of resources were collected during the lifespan of the project, some directly related to resilience and others indirectly related to resilience (e.g. mindfulness, coping strategies, self-care). Some resources were embedded within the staff program. For example, one activity involved participants reviewing the journal article which described a resilience enhancement program (e.g. *Transforming Lives Through Resilience Education* by Steinhardt & Dolbier, 2008; the *READY Program* by Burton et al., 2010; the *PATH Program* by Gerson & Fernandez, 2013). Another activity involved participants providing a brief critique of online resilience enhancement resources (e.g. Monash University's MOOC Mindfulness for Wellbeing and Peak Performance, the RESILnZ app, Melbourne University's Enhancing Student Wellbeing website).

A number of other resilience-related resources were reviewed by the project team to increase the breadth of resources available to others wishing to enhance the resilience of students and/or staff. A template was developed by the project team to inform this review and ensure standardisation of the information recorded. Resources were rated from one to three, one representing little value and/or relevance to enhancing resilience and three representing high relevance and value. Resources with a rating of one were excluded from the final project resource list comprises 45 resources. All resources were categorised by type (e.g. video, app, program, reading) and the key topic(s) covered.

One final resource, not mentioned elsewhere in this report, were illustrative case studies designed to demonstrate what program participants were able (or planned) to achieve. One full case study was captured from each university. These case studies, based on the Feedback for Learning project, featured a short description of the initiative, an interview with the program participants and key lessons learned.

4. Curriculum framework

The International Bureau of Education, United Nations Educational, Scientific and Cultural Organization's (2017) curriculum framework guide informed our project's curriculum framework. This framework was still in the early stages of development at the time of this final report. The expected date of completion is mid-December 2018.

5. Project website

The full complement of project resources (excluding the evaluation plan and tools) are hosted on the project website www.enhancingresilience.com. The structure of the website is in five main sections:

1. Resilience program (Facilitator Guide and Program materials)
2. Resources
3. Case studies
4. About (About this program, Definition of Resilience, Project team)
5. Contact us

Project impact, dissemination and evaluation

A comprehensive evaluation was undertaken to measure the impact of the project on students and the participants from the two-day staff program (see Table 3 below) with participant numbers (response rates) as of June 26, 2018. This plan was informed by Kirkpatrick and Kirkpatrick's (2006) program evaluation model and the updated program resources developed by Kirkpatrick Partners (2009).

Table 3. Overview of project evaluation adapted from Kirkpatrick & Kirkpatrick (2006) and Kirkpatrick Partners (2009)

Level		Outcome	Measure	N
Level 1	Reaction, confidence & commitment	Staff views on the learning experience	Post program staff survey	41
		Student views of the learning experience	Pre & post experience survey & focus groups (FG)	425 Pre 272 Post 84 FG
Level 2 (a)	Modification of attitudes & perceptions	Changes in attitude & perception towards the value of building resilience	Pre & post program interviews with staff	13 Pre 10 Post
			Pre & post experience survey & focus groups with students	425 Pre 272 Post 84 FG
Level 2 (b)	Acquisition of knowledge & skills	Increases in knowledge & skills of resilience & leadership	Pre & post program staff survey	38 Pre 18 Post
Level 3	Behavioural change	Staff transfer of learning to practice	Post program staff interviews	10 Post
		Student transfer of learning to practice	Student focus groups	84
Level 4 (a)	Change in organisational practice	Strategies to enhance student resilience are embedded within policy & curricula	Post program interviews & document audit (unit outlines, course maps)	10 Post

The validated tools utilised for this research were the Resilience Scale (Turner, Holdsworth, & Scott-Young, 2017) and the Kessler Psychological Distress Scale (K-10) (Kessler et al.,

2002). A leadership questionnaire based on the Integrated Competing Values Framework (Vilkinas & Cartan, 2006) was developed by the project lead. A program reaction survey was adapted from Kirkpatrick Partners' (2009) hybrid course evaluation form. The document audit was adapted from Reid, Sexton, and Orsi (2015) and the interview guide from Nasmith, Steinert, Saroyan, Daigle, and Franco (1997).

Staff were overwhelmingly positive about the program with an overall course satisfaction mean of 3.6 on a four-point Likert scale from *strongly disagree* (1) to *strongly agree* (4) for 73 per cent of participants who completed the post-program reaction survey. When asked to rate their level of confidence and commitment to implementing their action plan on a ten-point scale from *not confident at all* (1) to *extremely confident* (10), the mean score of eight indicted a high level of confidence and commitment to leading change. Note: The final quantitative and qualitative analysis for both staff and students is still underway. The results will be submitted as journal manuscripts.

The immediate impact of the project was evident in the number of staff program participants who were able to implement at least part of their action plan to enhance resilience. Some participants decided to lead change at a school or course level. For example: participants from the School of Occupational Therapy at Curtin University organised a half-day development program for 35 staff employed across all levels of their course. Several of these staff created a community of practice and implemented several changes to the occupational therapy course including explicit scaffolding of challenges across the curriculum to build student resilience. Changes included: all first-year students having to resubmit assignments which scored 49 per cent or below, whilst acting on the feedback they had received; introducing verbal examinations for third years which align more with student learning experiences within the clinical/fieldwork environment, and; a short message from the head of School streamed to all students within the occupational therapy, social work and speech pathology courses stressing this new culture of the school. In another example staff from three different faculties worked on a joint project to build student resilience through embedding self-reflection and peer feedback into assessment.

Other participants implemented change at the unit level. For example, one participant from speech pathology at Curtin University embedded discussion about the important role of resilience in work-integrated learning and employability along with activities to build student resilience across the final year of their course. Another staff member from professional psychology introduced a number of strategies that emphasised the importance of personal and professional wellness within the course including a peer mentoring scheme and periodic wellness checks. Due to restructures at Curtin and QUT, several staff who participated in the program left their university before they were able to implement any changes.

Project dissemination activities undertaken to date include:

- forty-five minute interactive Personally Arranged Learning Session at the Australian and New Zealand Association for Health Professional Educators conference in Adelaide, July 11−14, 2017 [48 participants];

- half-day (abbreviated) version of the staff program for Curtin University Occupational Therapy staff, December 4, 2017 [35 participants];

- ninety-minute workshop at the WA Teaching and Learning Forum at the University of Notre Dame, Fremantle, February 1–2, 2018 [~60 participants];

- half-day (abbreviated) version of the staff program for the Australian Collaborative Education Network at Curtin University, February 14, 2018 [55 participants];

- twenty-minute oral presentation at the Australian and New Zealand Association for Health Professional Educators conference in Hobart, July 1–4, 2018;

- one hour webinar to promote and share project progress and outcomes on May 15, 2018 advertised via the Australian Collaborative Education Network (ACEN), the World Association of Cooperative Education (WACE), Australian Interprofessional Practice and Education Network (AIPPEN), New Zealand Association for Cooperative Education (NZACE), Canadian Association for Co-operative Education (CAFCE), Australian and New Zealand Association for Health Professional Educators (ANZAHPE) [268 registrations from Australia, New Zealand, Canada and Malaysia];

- short reports, in the form of newsletter articles, were submitted for publication to the three partner university's newsletters, ACEN and ANZAHPE.

One dissemination event designed to specifically target the two Australian Technology Network universities not directly involved in the project (University of Technology Sydney and RMIT) was a two-hour workshop held at each university in May 2018. The project processes and outcomes were disseminated to 33 staff at these partner institutions.

Project dissemination initiatives in the planning stage include:

- a peer-reviewed journal article summarising the results of the literature review undertaken is to be submitted for publication to the Higher Education Research and Development journal;

- a peer-reviewed journal article on the outcomes of the development program for staff (journal yet to be determined);

- a peer-reviewed journal article on the outcomes of the development program for students (journal yet to be determined);

- team members will continue to present the project at key conferences (e.g. HERDSA, ACEN, WACE, ANZAHPE, WA Teaching and Learning Forum);

- a two-page project report to influential stakeholders including the DVCs-Academic at all five ATN universities, Curtin University's Faculty of Health Sciences Academic Board and Learning and Teaching Committee, Curtin Academy, Council of Accrediting Authorities, Council of Deans Health Sciences and Universities Australia.

- a process to recruit 'resilience ambassadors' at the lead ATN universities who will promote the project. For example, Directors of Learning and Teaching and Faculty Deans would be excellent champions and could assist in embedding resilience in the curriculum. In addition, several of the peer coaching groups established as part of the program workshops continue to meet and disseminate the program to their colleagues.

- formal event at each university to launch the project website. This event will include demonstrating the key elements of the website and inviting previous staff development program participants to share stories of success. Student representatives from key university bodies, including the Guild and student networks, will be invited to this event.

Additional next steps

In addition to broad dissemination of the project several steps to further embed the program within the ATN universities have been identified by members of the project team and expert reference group. For example, at Curtin University the project lead, Margo Brewer, will work with Julie Howell, Associate Director of Careers Employment Leadership to embed relevant elements of the program into their student employability and leadership courses and career planning workshops with career and leadership counsellors facilitating the program to students across all Curtin faculties. Curtin will also explore offering the program to student mentors and to new alumni to assist with managing their careers. Elements of the program would also be beneficial to higher degree by research (HDR) students to assist with managing the demands this entails. The project lead at each university will promote the program to key staff within HDR programs. A short online version of the course may be developed to further enhance implementation, particularly beyond the main university campuses to offshore campuses and our industry partners involved in the education of our students (e.g. industry staff involved in supervising students during work-integrated learning placements).

Key findings and recommendations

1. Establishing a shared understanding of the topic, in this case resilience, is a critical first step in the design, implementation and evaluation of a staff development program. It was evident at several forums where the project was presented that academic and industry staff had very diverse understandings of what resilience is and how it can be enhanced.

2. Broad adoption and dissemination of change is facilitated when the leadership (project) team comprises representatives from diverse disciplines and areas of work within the target organisation(s).

3. Staff delivering professional development for others must invest time in becoming familiar with contemporary research to ensure a strong evidence base to the learning experience and must invest time in developing their facilitation skills (e.g. adopt a train-the-trainer approach).

4. Attracting academic staff to attend professional development is challenging given current workloads and the multitude of competing demands they must juggle. Ensuring support for the staff development program by key executives (e.g. head of school/department/area) is essential to staff engagement.

5. Full participation in the program (attendance on both days) was significantly higher when the program was delivered as two consecutive days rather than two days spread out over a semester.

6. Effective staff development programs require more than one-off training sessions. Ongoing support in the form of coaching (by peers or experts) and mentoring are needed for staff to have the opportunity to test out their learning in-situ in the workplace and to address obstacles to implementing the desired change(s).

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