



REDSPACE:

CENTRE FOR APPLIED RESEARCH AND INNOVATION

PRAXIS 2016

IMPROVING EDUCATION PRACTICE
THROUGH ACTION RESEARCH



**CRITICAL PARTICIPATORY ACTION
RESEARCH (CPAR) EXPLAINED**



**CRITICAL PARTICIPATORY ACTION
RESEARCH (CPAR) 2015 CASE STUDIES**

**MAKE
GREAT
HAPPEN**





**REFLECTIVE PRACTICE IS
'A DIALOGUE OF THINKING
AND DOING THROUGH
WHICH I BECOME MORE
SKILLFUL'.**

- Schön 1983, p. 31

TAFE Queensland
Level 9, 133 Mary Street, Brisbane QLD 4000
PO BOX 16100, CITY EAST QLD 4001
Phone: +61 7 3514 3600
Fax: +61 7 3514 3650
tafeqld.edu.au

TAFE Queensland is committed to providing accessible services to Queenslanders from all culturally and linguistically diverse backgrounds. If you have any difficulty in understanding this brochure please call TAFE Queensland on (07) 3514 3600.

Images by: TAFE Queensland and iStock Photo Library (p. 5, 21)

ISSN 2206-9941 (Print) ISSN 2206-995X (Online)



Unless otherwise indicated this work is © TAFE Queensland 2016 and is licensed under a Creative Commons Attribution 4.0 International License.

Please attribute it as:
RedSpace: 2016, PRAXIS 2016. CPAR Vol. 1.
TAFE Queensland, Brisbane.

FOREWORD



Jodi Schmidt
Chief Executive Officer
TAFE Queensland

TAFE Queensland adopts a proactive and systematic approach to continually improving its teaching and administrative practices. In Praxis 2016, we share the benefits of reflective practice and educator-led learning innovation across our organisation from our 2015 portfolio of Critical Participatory Action Research (CPAR).

The TAFE Queensland Learning and Teaching Framework highlights our commitment to the practice of critical reflection and highlights the embedded practice of adopting an applied research approach to investigating new ways to improve the student experience and outcomes. Positioned within our Educator Capability Framework are the core skills of applied research and inquiry, guiding the development of educators in this area.

As the title of this publication suggests, educators must embody a willingness to continuously improve their practice. Research into our own practices is an example of this. Ongoing research and reflection enables us to remain sustainable and competitive within our sector. It enables us to respond to the needs of our students, industry and the economy. Innovation is one of TAFE Queensland's four key values and I believe the work shown in these Critical Participatory Action Research case studies is proof of our commitment to this value.

Thank you to all staff who continually find ways to improve our organisation and educational outcomes for our students. I would particularly like to thank and congratulate our TAFE Queensland educators whose work is shown in these Critical Participatory Action Research case studies.

I look forward to continuing to work with our staff and our students to identify opportunities to improve and innovate across TAFE Queensland.

Together, let's continue to power up for innovation and Make Great Happen.

WELCOME



Dr Christina Hong
Chief Academic Officer
TAFE Queensland

Critical Participatory Action Research is a method of responding to practical problems. The researcher identifies a problem or area for improvement; makes plans in consultation with stakeholders to bring about a change; implements the improvement; and then reflects on and learns from the outcome.

In 2015, TAFE Queensland partnered with Griffith University to pilot a Critical Participatory Action Research program. Pods of educators were established at TAFE Queensland Brisbane and TAFE Queensland Gold Coast. The program provides professional development in research practice, including an opportunity for our educators to undertake an action research project meaningful for them in a highly supportive environment. This program has strong alignment with Principle 6 - 'Critical reflection' - of our Learning and Teaching Framework. The program provides an opportunity to reflect on and improve practice through a systematic process. The pods provide a supportive, collaborative environment from which to innovate, grounded in a scholarly approach.

In Praxis 2016, we feature nine case studies demonstrating reflective practice across a variety of themes. These include: blended learning, technology utilisation, workplace learning and sustainability. We are also pleased with the diversity of teaching disciplines which include: veterinary nursing, community care, early childhood teaching and TAFE Queensland's Language and Literacy Services (TELLS).

TAFE Queensland is formalising its commitment to a culture of ongoing improvement and innovation through the establishment of the TAFE Queensland RedSpace: Centre for Applied Research and Innovation. Given the success of the CPAR 2015 program the CPAR program is continuing in 2016 with co-facilitation by RedSpace: and the Centre for Learning and Teaching.

TABLE OF CONTENTS

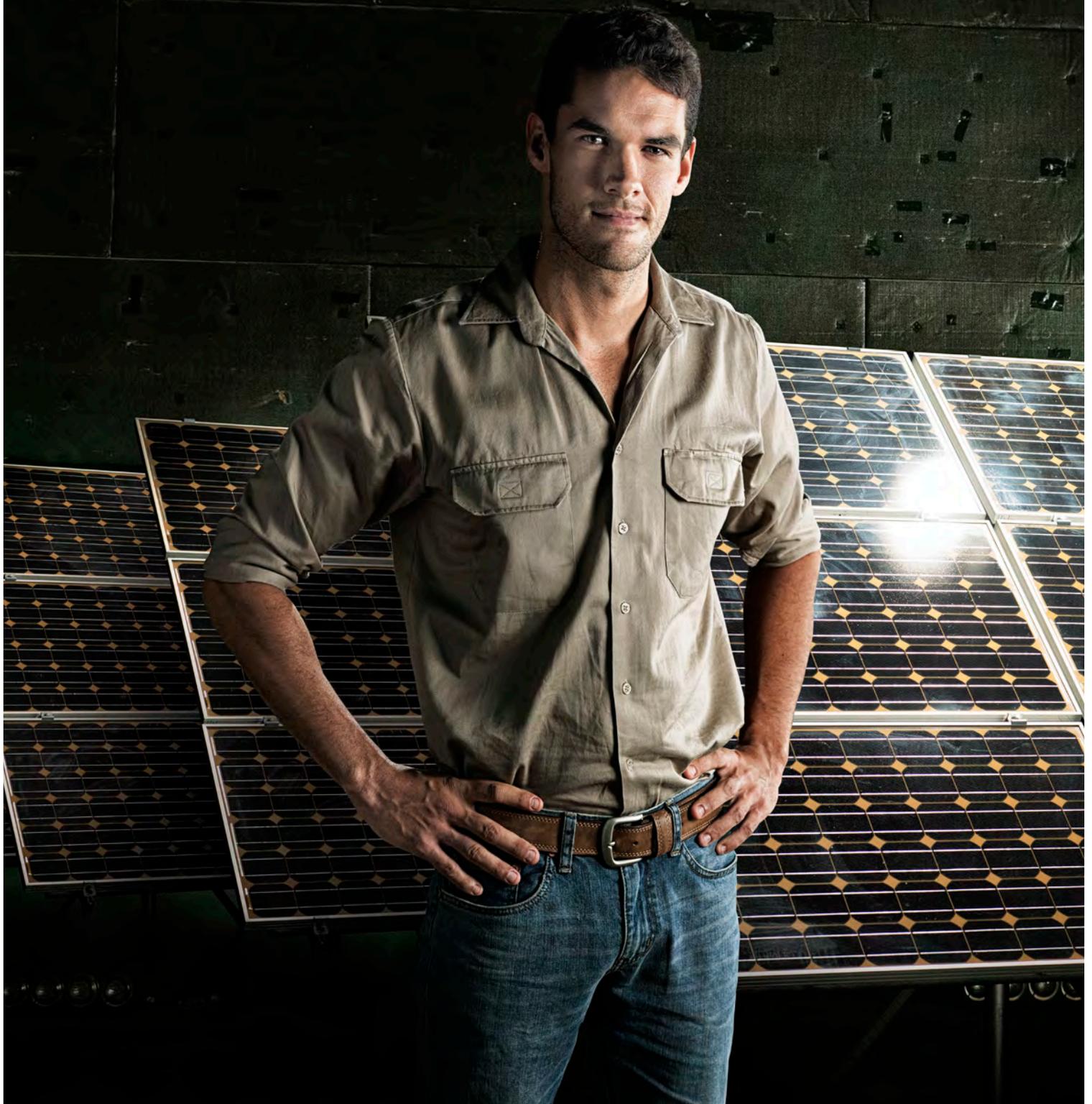
Critical participatory action research	3
Blended learning in justice studies improves student outcomes	4
VET practices transformed through student centred learning	6
Improving the blended learning experience in community care	8
TELLS transforms student capability through iTunes U	10
iTunes U transforms teaching practice in TELLs program	12
Improving the evaluation of nursing education	14
Enhancing workplace learning for veterinary nursing students	16
Intern, earn and learn: A proposed scholarship model	18
Early childhood teachers embracing sustainability training	20
RedSpace:	22
References	22



TAFE Queensland dental studies students.

“Excellence in education is related to the professionalism of staff, their commitment to their students’ success, and an organisational focus on providing an exceptional student experience.”

- TAFE Queensland 2016, p. 1



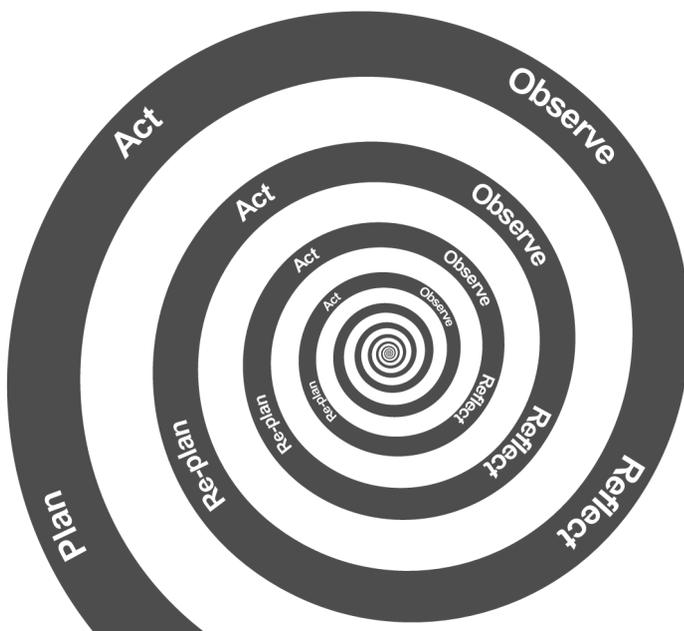


CRITICAL PARTICIPATORY ACTION RESEARCH (CPAR)

WHAT IS CPAR?

Critical Participatory Action Research (CPAR) is an applied research method. Central to CPAR is the involvement of the practitioner and their peers in investigating and solving problems. Rather than a 'detached' exploration of a problem or area for improvement by an outsider, the practitioner-researcher is active in the investigation of the issue and in identifying solutions.

The action research method involves a process of observing and reflecting, followed by the planning of an intervention or change, the implementation of this change, and an assessment of the change's impact. This cycle can continue iteratively as required until the required outcome is achieved.



CPAR CYCLE

(Kemmis, McTaggart & Nixon 2015, p. 19)

WHY USE CPAR?

CPAR is a highly practical research method that can provide numerous benefits to the practitioner-researcher and their organisation:

- The research method is a systematic approach to solving 'real-life' problems or improving practice. Its focus is on implementing a change that will improve a situation. Its potential applications in an organisation are infinite.
- The method allows for flexibility in reflection and action. Literature reviews, surveys, interviews and observation can be incorporated into reflecting on the problem and the impact of the solution. The implemented solution or change can also take infinite forms, from minor process changes, to changing of technology infrastructure, to development of a new product or service line.
- With practitioner empowerment at its core, CPAR has greater likelihood of implementing successful change in an organisation. The practitioner-researcher is active in solution identification and assessment and therefore is likely to have greater investment in its successful implementation. Their research and its findings has direct implications for them as a practitioner.



BLENDED LEARNING IN JUSTICE STUDIES IMPROVES STUDENT OUTCOMES

This project identified practical ways to improve the blended delivery of training (combining educational technologies with face-to-face delivery) for Justice Studies at TAFE Queensland Brisbane, to improve student learning outcomes. This project was led by Frank Short, who is the Team Manager for the Faculty of Business at TAFE Queensland Brisbane, along with five other educators based at the Loganlea Campus.



BACKGROUND

TAFE Queensland encourages blended learning strategies to ensure accessible, flexible, responsive and personalised learning options. Learning online has many benefits including allowing students to learn at their own pace to their own timetables, and can involve innovative and interactive tools and online collaboration.

However, while TAFE Queensland offers a range of Justice Studies courses across the State, many are delivered face-to-face only, which can limit access to study for those working full-time, and/or living some distance from a campus. The concept of blended learning and its appreciation is still evolving, and efforts to implement blended learning have met with mixed outcomes.

There are two general approaches to blending learning with educator-centric approaches most commonly employed i.e. those decided by the educator. Student-centric approaches – based on identifying student learning needs – are more challenging to implement: the maturity of the student should ideally, dictate the approach rather than the preference of the educator or institution.



THE STUDY

The purpose of this study was to investigate best practice in blended delivery i.e. using a range of delivery methods such as face-to-face and online to improve student outcomes.

The study included reviews of existing literature on blended learning, surveys with educators and students and in-depth interviews with educational experts. This research informed changes to classroom practices in the Justice programs.



FINDINGS

The study identified that there are certain conditions that will help to ensure blended learning delivery is successful – that it increases student and educator satisfaction, and improves student outcomes:

1. Training educators in the concept and illustrating advantages through a successful pilot program supported by data builds educator commitment, and is most critical to success;
2. Engaging and supporting educators in the development of the resources and generating discussion/sharing ideas at the teaching team level;
3. Taking a strategic, rather than ad hoc, approach to the implementation of blended learning so it is incorporated into planning documents with KPI's all the way down to individual staff;
4. Identifying and supporting a workplace champion; someone with a high level of influence and commitment to drive the implementation of blended learning;
5. Adopting an institution-wide approach makes implementation most effective, as opposed to implementing it educator by educator;
6. An accurate and ongoing assessment of the level of student maturity is critical to success. Processes to assess and respond to student progress and development need to be in place to accommodate the student gaining maturity, thereby encouraging a student-centric rather than educator-centric approach;
7. Ensuring learning resources are interesting and engaging for the student and are designed to generate thinking on a range of levels; and
8. A robust learning management system (LMS) should promote effective communication, for example, encourage contact between students and faculty, and cooperation among students, while giving prompt feedback.

ACTION RESEARCH SNAPSHOT

429 Students in 2015
Justice Studies

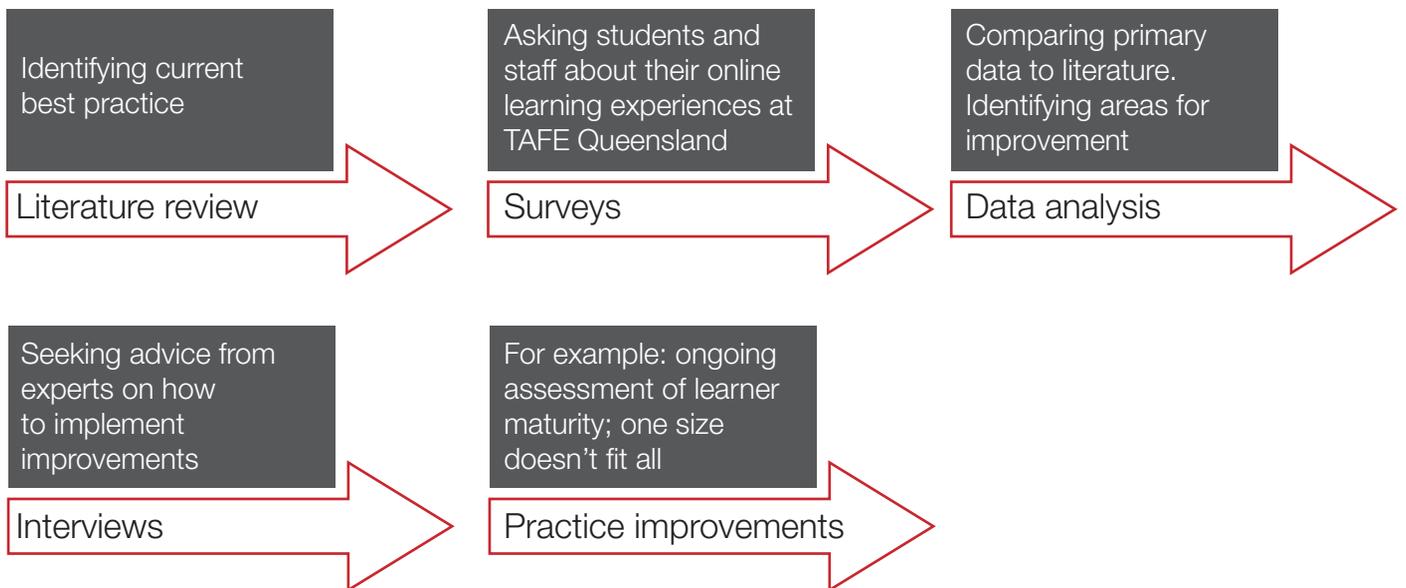
Q Literature reviews
Questionnaires
Interviews

6 Educators in
research team



“The study has provided insights and a greater understanding of blended delivery, what forms this can take in the TAFE environment and the significant challenges associated with facilitating implementation.”

Frank Short



REFLECTIONS

Based on this research study, improved blended learning practice is expected to result in:

- Significant financial gains through better use of resources
- Increased student satisfaction
- Positive student outcomes
- Increased educator satisfaction



VET PRACTICES TRANSFORMED THROUGH STUDENT CENTRED LEARNING

The TAFE Queensland Gold Coast Hospitality School faced the challenge of maintaining high quality delivery of complex programs with rapidly increased student numbers. Rachid Abed (Associate Centre Director, Business, Hospitality and Language at TAFE Queensland East Coast), led this study to improve the student experience. Following implementation of his recommendations - student retention rates have increased.



BACKGROUND

In 2014 a new diploma was introduced in the TAFE Queensland Gold Coast Hospitality School which combined elements from three different programs (hospitality, events and tourism). The pilot involved a weekly one-hour theory lecture and two-hour task-based class tutorials. Rapid growth in student numbers (from 30 to 120 in the diploma) caused problems relating to scaling the program. The challenge was to optimise delivery to maintain high quality student learning experiences.



THE STUDY

The aim of this research was to identify strategies to overcome challenges in the educational delivery of the diploma. The first phase of the study identified key challenges. The second phase enabled potential solutions to be identified and trialled.

Key research activities undertaken included:

1. A review of TAFE Queensland research on student outcomes and relevant literature. This study was informed by the TAFE Queensland Student Success Strategy and Student Retention and Completion Strategy;
2. Twelve student interviews;
3. A survey (n=40) of students with a combination of open-ended questions and general comment options;
4. Industry consultation, validation and moderation.

The key challenges identified were:

1. Changed expectations in the classroom were not fully understood by students;
2. It is difficult to scale an approach of small group discussions after a lecture. Discussions became more challenging with high student numbers.



FINDINGS

From the identified challenges, literature review and industry consultation, Abed proposed a variety of refinements to the program delivery:

1. Reinforcement of a two-hour collaborative classroom approach with a one hour traditional lecture each week;
2. Establishment of educator 'communities of practice';
3. Updated course information brochure to reflect the new program approach;
4. An emphasis on students to complete class pre-work;
5. A blended delivery approach (online and in-person, different hours of in-person contact times);
6. A specific classroom was created for collaborative classes – with desks arranged for teams and task-based engagement and shared computers;
7. Increased systematic industry consultation and improved communication between all stakeholders;
8. Enhancements to the quality program; and
9. Development of new key performance indicators (KPIs) for educators that align with TAFE Queensland Strategic Objectives.

These changes were trialled in the diploma with many improvements noted.



REFLECTIONS

Abed's recommendations enabled and reinforced the student-centred learning approach, and saw educator roles transition from 'one-to-many delivery' towards 'facilitators of student collaboration and task-based engagement'. The program reported significantly improved student retention, completion and success rates following the research project. Abed believes this is because students were more involved in their learning process.

ACTION RESEARCH SNAPSHOT

40

Students surveyed



Literature review
12 interviews; surveys;
Industry consultation

120

Students benefited immediately
from the study



“This study implemented a cycle of feedback from key stakeholders during various stages of program delivery, together with research and reflection on that feedback underpinned by literature and statistics.”

Rachid Abed



TAFE Queensland hospitality students.

KEY BENEFITS OF THE CHANGES

1. Increased efficiencies in program delivery for larger numbers of students (120+);
2. Blended delivery enabled students to learn at home and on campus, and to benefit from collaborative peer support. A new evening part-time program also suited students with work or family commitments;
3. Peer to peer scaffolding of learning – students supporting each other to develop their individual learning goals - enabled students to improve critical thinking and collaboration skills;
4. Educator collaboration significantly improved and became important for successful delivery of the program. Social interaction and sharing within a community of practice helps improve the consistency of quality delivery and is aligned with the principles of ‘situated learning’ (Lave & Wenger 1990), a theory of knowledge acquisition that focuses on problem solving skills and is linked to the theory of affordances (Gibson 1977), and social learning (Vygotsky 1978);
5. Increased industry consultation and an improved positive culture impacted the overall quality of the program and it increased levels of trust and mutual support amongst TAFE Queensland Gold Coast teaching staff, industry stakeholders and students; and
6. The enhancement of the quality of the program has strengthened the reputation of TAFE Queensland Gold Coast as a trusted provider.



IMPROVING THE BLENDED LEARNING EXPERIENCE IN COMMUNITY CARE

Motivated by the challenge of placing and managing increasing numbers of students through work placements, this study aimed to optimise the design and planning of workplace learning. The research highlighted the importance of employer engagement, and reinforced contextualisation of delivery and assessments as crucial for effective workplace delivery. The project was led by Nikola Kalamir, an educator and coordinator in the Faculty of Community Services, Health and Nursing at TAFE Queensland Gold Coast.



BACKGROUND

In 2014 the Diploma of Community Services program at TAFE Queensland Gold Coast campus comprised 130 enrolled students and three community services partners (employers) in the disability, mental health, cultural diversity, drugs and alcohol, and child protection sectors.

Demand for workplace learning in Community Services programs rapidly increased in the years to 2014. To resolve challenges of rapid growth and the more sophisticated needs of student learning in the workplace, TAFE Queensland Gold Coast implemented a blended learning approach to programs with workplace teaching.

Blended learning refers to the delivery of study options that allow students to learn via a mix of modes – online digital media and face-to-face in classrooms with educators and peers. The TAFE Queensland Learning and Teaching Principles and Practices encourage blended learning strategies to ensure accessible, flexible, responsive and personalised learning options.



THE STUDY

The primary aim of the study was to optimise the design and planning of blended workplace delivery to increase student engagement. A second aim was to use available technology to improve assessment efficiency and consistency of practice across educators, students and employers.

The study undertook a review of available literature and internal TAFE Queensland studies, which informed a survey of students and employers, and in-person discussions with teachers. Survey responses were low (less than twenty per cent), and no employers responded. Kalamir subsequently held informal discussions with faculty colleagues and employers.



FINDINGS

The study found that a variety of challenges associated with the blended learning approach were being experienced by students and educators (refer over). A lack of engagement with employers for workplace learning was also evidenced.

Kalamir responded to these findings by identifying a range of changes and enhancements to the blended learning approach (refer over). These included tools to better support students in their blended learning, and strategies to assist educators and employers in their role as facilitators. These changes have now been implemented in the Community Services program.



REFLECTIONS

Kalamir suggests that employers may not be fully aware of the demands that workplace learning places on students and themselves, and the importance of their role in the process. The study has also confirmed that greater flexibility in course delivery is beneficial. The criticality of clear and consistent communication with students is key to the student experience and their success.



TAFE Queensland nursing students undertaking training.

ACTION RESEARCH SNAPSHOT



Problem: increasing demand for work placements



Literature reviews
Surveys
Informal discussion



Students benefited immediately from the study



“The research highlighted the importance of employer engagement, and contextualisation of delivery and assessments seems to be crucial for effective workplace delivery.”

Nikola Kalamir

X CHALLENGES

EXPERIENCED BY STUDENTS

1. A need for clearer communication to explain the new delivery mode and its requirements;
2. A need for greater clarity relating to the workload and the timeframe for completion; and
3. A lack of employer support in terms of study time.

EXPERIENCED BY EDUCATORS

1. Need for improved delivery planning, including clear communication on the volume of learning and blended delivery mode;
2. Pre-screening of student LLN (language, literacy and numeracy skills) and digital literacy skills to confirm they meet program requirements and/or indicate individual support needs;
3. Students need clarity on digital literacy skills, the blended delivery mode and the expectation that assessments should be completed within delivery sessions; and
4. Employers could be more involved and supportive, for example by allowing employee study time and providing study spaces.

✓ INTERVENTIONS

1. Screening tests for LLN and digital literacy are now undertaken before program commencement;
2. Study skills workshops are held and specific feedback tools are in development;
3. The importance of clear, timely communication with students in the workplace was reinforced, and educators now respond to student questions within a maximum of two days;
4. A general introductory kit will be developed for the course;
5. Peer mentoring for educators will be introduced; and collaboration between educators actively encouraged;
6. Educators are encouraged to engage with employers – about perceptions and potential resources – before course commencement.



TELLS TRANSFORMS STUDENT CAPABILITY THROUGH iTunes U

Students are becoming more technologically savvy. This 2015 project tested whether iPads and iTunes U could improve service delivery to TAFE Queensland English Language and Literacy Services (TELLS) students. An action research trial was undertaken in a classroom situation with 20 students surveyed. This successful project was led by Karen Grice, an English language educator at TAFE Queensland Brisbane.



BACKGROUND

TELLS supports the delivery of the Adult Migrant English Program (AMEP) and Skills for Education and Employment (SEE) program. The programs are delivered state-wide by TAFE Queensland in 35 locations and online. They are designed to assist newly arrived migrants, refugees, humanitarian entrants and unemployed Australians from English speaking and diverse cultural and linguistic backgrounds.

Educators in the TELLs program face significant challenges, including:

1. Wide variance in individual student ages and needs;
2. Nascent English language and literacy skills combined with a lack of digital literacy creates a major stumbling block to students looking for work in Australia, with online learning or training representing a significant challenge;
3. The SEE program involves continuous student enrolment and high levels of reporting requirements;
4. Programs are delivered in an environment of contestability. Innovation in the delivery and quality of programs and regulatory compliance are ongoing high priorities.

The earlier rollout of 1,200 iPads had been impacted by technical problems and traditional classroom delivery approaches remained the norm. The full potential of these devices was not being explored.



THE STUDY

The aim of this research was to determine whether iTunes U online courses on iPads would enhance student engagement and improve outcomes in the SEE program. The study sought to develop a productive, sustainable and inclusive teaching model (see Kemmis & McTaggart 2014) that would cater for continuous enrolment, increase student engagement and outcomes, and develop digital literacy skills.



FINDINGS

The study found that iTunes U provided a sustainable, productive and inclusive delivery model that improved the digital literacy of students, specifically:

1. Students were asked whether iTunes U helped them to learn more about working in Australia and 56 per cent responding 'yes, a lot' and 43 per cent with 'yes, some';
2. The iTunes U delivery model (which decreased the amount of 'teacher talk') allowed more time for students to gain digital skills and develop 'real-world' English language skills. Grice identified that teaching language students how to learn online emerged as critically important. Students must be equipped with the learning tools and digital literacy capability to navigate online learning platforms;
3. 99 per cent of students reported that iTunes U is either 'important' or 'very important' to their learning;
4. The study was not without challenges: namely technical challenges and workload management. Significant time was spent organising reliable Wi-Fi and generic Apple IDs, and it was suggested that technical support would be useful in future iterations.



REFLECTIONS

The research findings have resulted in further improvement of the TELLs iTunes U course. The trial findings have also been shared widely within TAFE Queensland and educators have been encouraged to reuse preloaded iTunes U courses. Grice recommended opportunities for educator professional development to learn about iTunes U as a way to increase educational use of iPads and help students gain digital literacy capability. Grice also has recommended the creation of a TAFE Queensland iTunes U site because the project may be replicated by SEE programs in other regions, and this would promote state-wide consistency.

ACTION RESEARCH SNAPSHOT

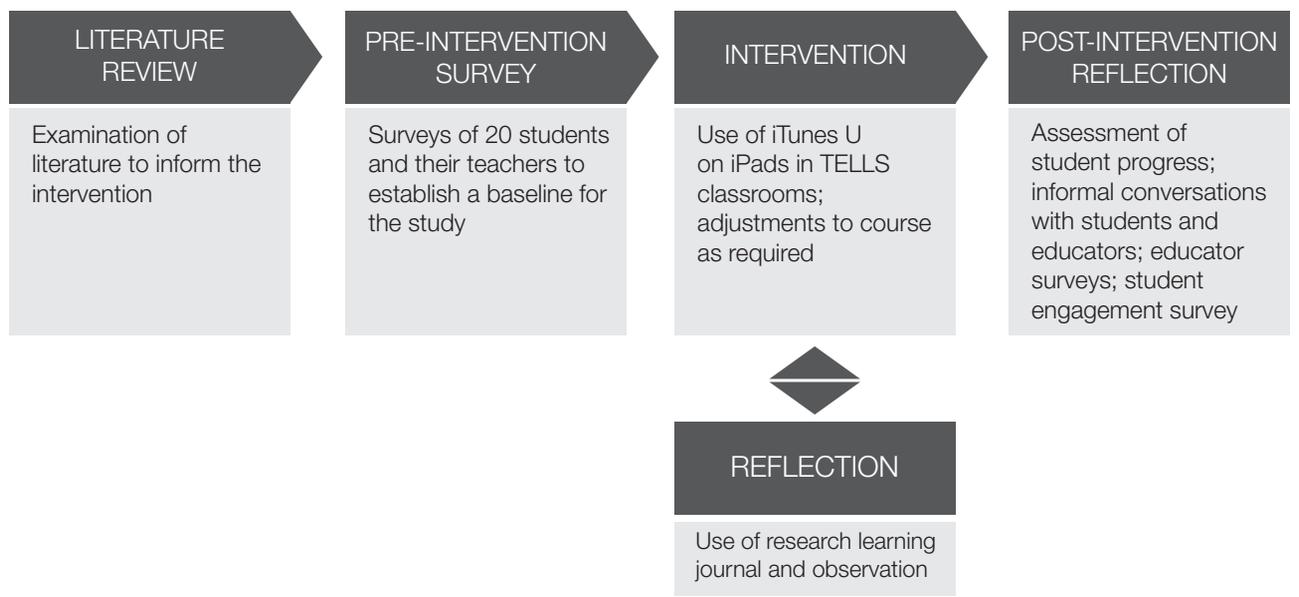
99% Students report that iTunes U is beneficial

Q Surveys
Literature review

20 Research participants



“Survey results indicated that iTunes U provided a sustainable, productive and inclusive delivery model that improved the digital literacy of students.”
Karen Grice



Students and educators at work during the iPad and iTunes U trial within TAFE Queensland.





iTunes U TRANSFORMS TEACHING PRACTICE IN TELLS PROGRAM

In 2014, 1,200 iPads were rolled out state-wide in the TAFE Queensland English Language and Literacy Services (TELLS) program for student use. This project tested whether the iPads and the iTunes U App could redefine learning processes rather than support continued existing processes. This study was led by Annette Winch, Principal Training Advisor of Educator Capability TAFE Queensland Gold Coast.



BACKGROUND

TELLS supports the delivery of the Adult Migrant English Program (AMEP) and Skills for Education and Employment (SEE) program. The programs are delivered state-wide by TAFE Queensland in 35 locations and online. They are designed to assist newly arrived migrants, refugees, humanitarian entrants and unemployed Australians from English speaking and diverse cultural and linguistic backgrounds.

Educators in the TELLS program face significant challenges, including:

1. Wide variance in individual student ages and needs;
2. Nascent English language and literacy skills combined with a lack of digital literacy creates a major stumbling block to students looking for work in Australia, with online learning or training representing a significant challenge;
3. High levels of reporting requirements;
4. Programs are delivered in an environment of contestability. Innovation in the delivery and quality of programs and regulatory compliance are ongoing high priorities.

The rollout of 1,200 iPads had experienced technical problems and traditional classroom delivery approaches remained the norm. Their full potential was not being explored.



THE STUDY

The aim of this research was to determine whether iTunes U online courses act as a catalyst to build educator capability and new delivery models for TELLS programs. The study aimed to test whether iTunes U courses act as 'change agents' to transform the design, development, distribution and delivery of content. It also aimed to explore business opportunities, barriers and issues with deploying content via iTunes U on iPads.



FINDINGS

The study found that iTunes U provided a sustainable, productive and inclusive delivery model that improved the digital literacy of students, specifically:

1. A drop from 80 per cent to 40 per cent using the iPads merely as a 'substitution' device, with a 10 per cent increase in 'augmentation';
2. 15 per cent increase in modifications to delivery, indicating significant change in delivery tasks;
3. Where there was no indication of using technology to redefine delivery at the start of study, the post-study data indicates a 5 per cent shift to redefine delivery and include new tasks;
4. The study was not without challenges, namely technical issues and workload management. Significant time was spent organising reliable Wi-fi and generic Apple IDs. It was suggested that technical support would be useful in future iterations.



REFLECTIONS

Winch observed that iTunes U stimulated task redesign and iPad use became 'transformational'. iTunes U required educators to reflect on current material and practice, learn underpinning theories of copyright, instructional design content development, App and activities selection as well as the technical aspects to navigate their iTunes U course suited to the abilities and context of their own contemporary learning environment.

The project may be replicated in AMEP and SEE programs in other regions, leading to state-wide consistency of TELLS programs. The iTunes U model may apply to other programs within TAFE Queensland, including delivery to international students. Future studies could explore processes for low-cost digital collaboration across TAFE Queensland Regions.

ACTION RESEARCH SNAPSHOT

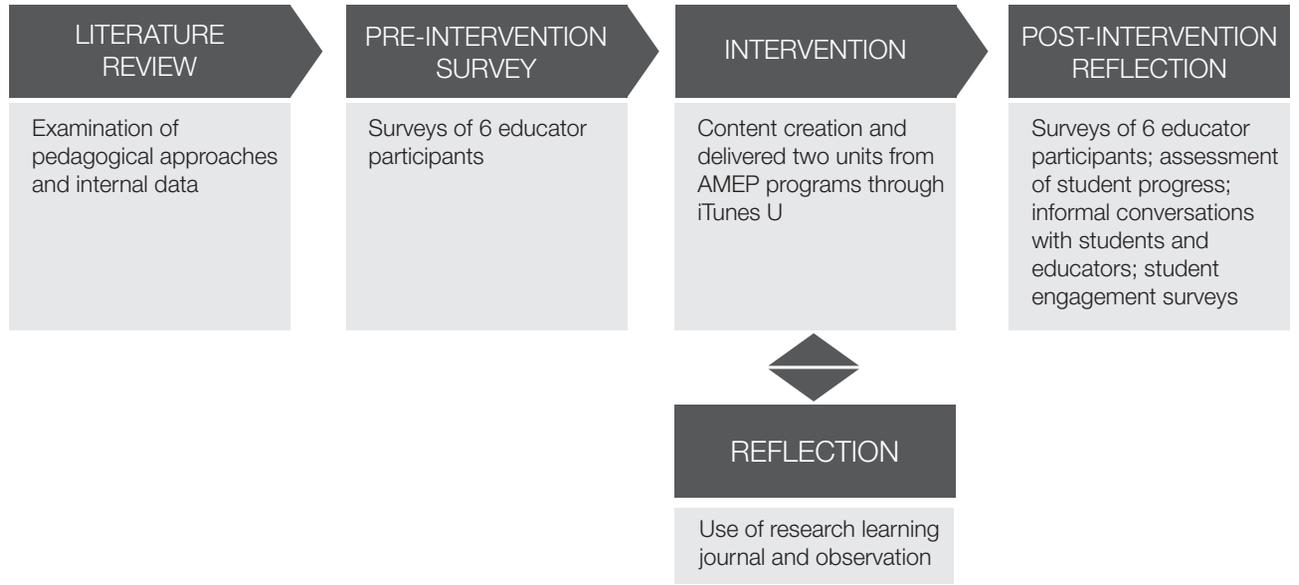
60% Research participants report iPads as a valuable learning tool

Q Surveys
Literature review

5 Educators in research team



“Students were able to work at their own pace, self-directed exploring.... I was available to spend more one on one time with the Students who needed the additional support. Students also requested access to the online learning material (iTunes U Course) outside of class time. They were able to do this by downloading on their own devices, enabling access 24/7.”
Annette Winch



Students engaged in learning during the iPad and iTunes U trial within TAFE Queensland.





IMPROVING THE EVALUATION OF NURSING EDUCATION

Student evaluations are an important tool in improving course content and delivery. This research project improved the questionnaire being used to evaluate Diploma of Nursing courses. The project was led by Kris Backwell, a critical care nurse who is a Leading Vocational Educator at TAFE Queensland Gold Coast, and Sue Jones, a critical care, emergency, and neuroscience nurse who is a blended and online Educator at TAFE Queensland Gold Coast.



BACKGROUND

Backwell and Jones were experiencing a problem with evaluating the quality of their teaching. During the Diploma of Nursing course, students were often raising issues in class or by email with their teachers. Generally, these issues were dealt with immediately by the teachers. However, by the end-of-course student satisfaction surveys such issues or concerns had been forgotten by students.

Whilst this resulted in excellent results in the course evaluations, it resulted in areas for systematic improvement not being identified through this formal evaluation process. It was believed that the course evaluation methodology was ineffective in identifying key students' learning needs in a timely manner, and needed to be improved.



THE STUDY

The aim of this research was to implement a new course review method to directly evaluate pedagogical practices in the course in order to create a continuing process which addressed student feedback as it occurred.

A student survey questionnaire was developed for use in conjunction with a structured agenda for student focus group discussion. The questionnaire was a pen and paper format initially, but the research team soon realised that this method reached only 68 students, an insufficient number to provide a reasonable amount of raw data.

As a result, the questionnaire was converted to an electronic format and an online survey tool was utilised to reach a broader audience (100). The online tool also assisted with the analysis of the data which reduced the time required to identify findings.

Over two semesters from July 2015 to October 2015, students were surveyed with 10 questions on the positives and barriers in their learning experience (e.g. teaching methods, facilitators, level of support).



FINDINGS

The major findings from the improved course evaluation method were:

1. There was inconsistency of teaching leading to student confusion;
2. The dynamics of the small group work required were problematic for students;
3. Students requested more online lectures; and
4. An increased amount of practical work was sought by students.

Surprisingly, as lecture delivery is considered a more passive form of learning, students rated lectures and clinical case studies the highest of six delivery methods.



REFLECTIONS

The research findings have helped bridge the gap between pedagogic theory and practice, leading to improvements in practice. Three improvements were immediately made to teaching practice as a result of the findings:

1. Workshops were held for educators to standardise delivery;
2. An A-Z book of knowledge was provided to students for use during vocational placements; and
3. Interactive images and videos were embedded to support online learning.

ACTION RESEARCH SNAPSHOT

1372 Diploma of Nursing
Students in 2015

Q Reflect - act - reflect - act

2 Educators in research term

Pre-intervention

- Single end-of-course survey
- Ad-hoc concerns or issues during course not necessarily raised in end-of-course survey



Intervention 1

- Improved hard copy survey provided to students (including questions on barriers to learning)
- Hard copy medium prevents some students from participating in evaluation



Intervention 2

- Improved survey embedded in TAFE Queensland online Learning Management System
- 100 students able to participate in evaluation
- Data analytics software assists in identifying areas for improvement
- More comprehensive and complete feedback on program



“The findings are considered to be relevant to all faculties. The researchers recommend that the questionnaire be embedded into the new TAFE Queensland Connect learning platform for use across faculties state-wide.”

Kris Backwell



ENHANCING WORKPLACE LEARNING FOR VETERINARY NURSING STUDENTS

This research developed a range of strategies for improving the standardisation of industry workplace supervision and assessment for Certificate IV Veterinary Nursing students. The research led to closer ties with the veterinary profession and in better preparing students for their work placements. The research team comprised Veterinary Nursing Educator Kerry Henry and TAFE Queensland Brisbane Educator, Trish Clarke.



BACKGROUND

Students currently complete their work placement component for the Certificate IV in Veterinary Nursing by participating in vocational placement (internal students) or through their employment in veterinary practices (external students). These veterinary practices are diverse in terms of the services they provide (for example small animal or mixed practices/specialist referral) as well as their location throughout Queensland. This diversity creates issues of communication due to geography and lack of support and training for the workplace supervisors. These two factors led to limitations with standardisation of supervision and impacts on the quality of learning outcomes and TAFE Queensland relationships with veterinary practices.

The research also produced valuable demographic data and information about the diversity of veterinary practices as well as important insights regarding students' perspectives on vocational placement. Specifically, the following challenges or areas for improvement were identified:

1. Improving veterinary educators ability to communicate with and support workplace supervisors in Brisbane and remotely;
2. Providing more timely communication with supervisors;
3. Making the vocational placement skills logbook more user friendly; and
4. Reviewing the timing and number of practice-based assignments as current scheduling makes it difficult for students to manage their workload and for supervisors to organise work-based opportunities for students.



THE STUDY

In this study, strategies were explored to improve the standardisation of workplace supervision, in collaboration with key stakeholders.

The findings resulted in several recommendations. These included a review of: assignment workload for students on vocational placement; tools and technologies to improve communication with workplace supervisors throughout vocational placements.

The first stage of the research was to understand challenges faced by students and their supervisors. Supervisors included veterinarians and workplace supervisors and veterinary nursing students throughout Queensland but mainly the south-east corner. Feedback from students (n=46) and supervisors (n=33) was elicited through questionnaires. Following analysis of this feedback a variety of strategies were identified to improve standardisation of workplace supervision.



REFLECTIONS

Henry recommended that veterinary nursing TAFE Queensland educators of the future work more closely with industry, including spending time in the workplace to enhance delivery and assessment of the practical component of courses. Their focus needs to be more work-based, developing partnerships and meeting industry needs.



FINDINGS

The study found that there was a need for improvement of communication protocols, design of the vocational placement logbook and timing of student assignments.

Henry noted that demand on veterinary practices for student work placements is reaching saturation point. TAFE Queensland may need to consider providing financial remuneration to veterinary practices providing placements as an incentive and recognition of the valuable role these practices play.

ACTION RESEARCH SNAPSHOT

33 Vocational placement supervisors surveyed

46 Vet Nursing students surveyed

20 Students enrolled in Cert IV in Veterinary Nursing in 2015



“These findings also have implications for the quality of work placements in other practice-based fields such as nursing and paramedics. Future cross-industry collaborative projects with these fields would also be highly beneficial and synergistic.”

Kerry Henry

SURVEY FINDINGS

INTERVENTION

Improvement areas:

1. Communication protocols
2. Design of the vocational placement logbook
3. Timing of student assignments



Provision of support materials for workplace supervisors e.g. uploading training videos, articles about teaching and assessment strategies, PowerPoints with voice-overs and other strategies such as virtual meetings.



Adoption of an e-portfolio system whereby workplace supervisors can communicate more efficiently and effectively with TAFE Queensland educators, and provide student feedback online.



Educators re-evaluate the assignment workload for students on vocational placement.



“There is a need to ensure the work placement experience is a positive and useful one for everyone concerned. The need for students to have the necessary knowledge and skills before embarking on work placement has informed teaching practice to ensure students gain this experience early in the semester.”

Kerry Henry



TAFE Queensland animal studies student and educator.





INTERN, EARN AND LEARN: A PROPOSED SCHOLARSHIP MODEL

This project identified three potential scholarship models that may alleviate some of the financial pressures experienced by students. The project was led Dr. Ross McLennan from TAFE Queensland Brisbane, Faculty of Creative Arts and Digital Design.



BACKGROUND

Student debt and financial support while studying is a major challenge for students, and a key reason for non-completion of courses is affordability.



THE STUDY

The aim of this research was to identify a new scholarship model to alleviate financial pressure on students.

McLennan believed if industry, government and students shared the costs of education, many of the inherent expenses and inequities of current loan systems could be circumvented. He conceived an apprentice-like model, offering all students an education that incorporates on-the-job practice and real industry experience, yet maintains the academic rigour, research focus and professional growth in line with a University-style undergraduate programme. If it could be encompassed in an educational model - with some form of student remuneration included – an authentic and potentially debt-free tertiary education could be offered.

McLennan hypothesised the student role as one of intern, with student remuneration being accumulated and pooled towards a series of academic financial scholarships awarded upon graduation. In an ideal scenario, these scholarships - based on merit throughout the students' studies - could be used to off-set student debt.

A study to explore this hypothesis was undertaken. The study included three stages:

1. Literature review into current funding models;
2. Case study interviews of local examples of commercial ventures on campus;
3. Reflection and creation of a new scholarship model.



FINDINGS

Commercialising on campus workspaces is common in the vocational education sector. TAFE Queensland Brisbane's Hospitality department has created and implemented commercial workspaces for over 50 years. Studio Kaboom (a TAFE Queensland venture) had also been in operation for ten years at time of the study (2015) and offered vocational-level Diploma and Advanced Diploma games students' real world experience in a commercial studio space. However, there is no scholarship fund in place, nor any other form of student remuneration for work in these workspaces.

McLennan concluded there are considerable benefits of incorporating workplace internships on campus. However, he noted that what is missing from all existing TAFE Queensland internship models – but is present in the apprenticeship model – is the remuneration of student workers. He suggested an Honours Scholarship model as an ethical and sustainable model of student remuneration that industry will support. Such a model is currently employed by Griffith University's Liveworm studio where profits were re-invested in resourcing and maintenance of the business and further profits were pooled into an Honour Scholarship fund. The scholarships could then be made available upon graduation and could ideally be used to off-set student debt.



REFLECTIONS

The research provides an alternative scholarship model that may be trialled within TAFE Queensland. It is anticipated that the model will sustain the quality of learning outcomes while mitigating some of the financial challenges faced by students which ultimately impact their ability to complete their studies.

ACTION RESEARCH SNAPSHOT



Tackling financial challenges in education



Literature reviews
Surveys
Case studies



Educator in research team



“Solutions to big problems can begin with action at the local level. I have always wanted my students to be involved in real world experiences as part of their education and I have always discussed the notion of on-campus commerce, where students were remunerated for their work as an end goal.”

Dr. Ross McLennan



Dr Ross McLennan
Principal Teacher, Music
TAFE Queensland

Dr Ross McLennan, the Principal Teacher, Music, at TAFE Queensland, Brisbane campus was the winner of the TDA/ AVETRA Innovation Scholarship for 2016.

Dr McLennan developed his successful innovation scholarship application from his CPAR project. The Innovation Scholarship is a joint TDA and AVETRA initiative that supports TAFE practitioners to engage in research that leads to innovation and change in VET.





EARLY CHILDHOOD TEACHERS EMBRACING SUSTAINABILITY TRAINING

Education has a key role in driving a sustainable-mindset for all citizens. Early Childhood and Care educator Dr. Sharon Stuhmcke has undertaken research into the effectiveness of sustainability training delivered by TAFE Queensland to Early Childhood Educators. The findings were that the TAFE Queensland Brisbane's sustainability training in the Early Childhood Education and Care faculty was effective in broadening the understanding of pre-service educators.



BACKGROUND

Sustainable development (SD) has grown in global importance in recent decades. In 2002, the UN declared that education was an important factor in improving SD: education was a “motor for change”. In 2008, a UN working group recommended that educators required improved SD professional development and that “early childhood is a natural starting point for education”:

Strengthen teacher training as a basis for learning and teaching about education for sustainable development. Pre-service and in-service training of early childhood educators and caregivers in all countries must be revisited and reinforced from the perspectives of learning for sustainability, and must be provided regularly.

(Pramling Samuelsson & Kaga 2008:16)

At TAFE Queensland Brisbane, the ‘sustainability cluster’ is made up of three units of competency within the final semester of the Diploma of Early Childhood Education and Care qualification. In 2015, 1208 students were enrolled in the Diploma of Early Childhood and Care making it one of TAFE Queensland's most popular courses.



THE STUDY

The study examined the rate of adoption by students of the principles and demonstrated understandings of sustainability in their educator practice during their work placements. Student understanding and practices were tracked via direct observation and analysis of student assessments. Thirty students were surveyed at the beginning, middle and end of their six-month Early Childhood Education for Sustainability (ECEfS) studies (January 2015 to June 2015), to identify changes in practice and understanding.



FINDINGS

Results showed the following:

Round 1: Prior to undergoing sustainability training, pre-service educator thinking was mainly undeveloped and focused on basic sustainability concepts such as recycling, conservation and healthy environment topics, with one student believing that sustainability concepts were not necessary for children under 6 years of age;

Round 2: Following training, pre-service educators indicated changes in personal practices, heightened awareness of the intergenerational influences prompted by sustainability training, a perception of sustainability as focused on taking action and creating positive change, a better understanding of the political, social and economic dimensions of sustainability, and an interest in project-based learning for young children;

Round 3: As part of their placement, pre-service educators undertook sustainability projects in the workplace related primarily to the environmental dimension of sustainability, the dimension with the most obvious linkage. Some of the project topics were: Investigation into snakes; What happens to trash; Caring for our environment; Recycling; Gardening; Exploring life-cycles. Significantly, all projects adopted a hands-on approach and encouraged children to direct the learning process. However, the student projects did not address the other dimensions of sustainability - political, economic or social. Informal feedback revealed students felt ‘safer’ leading environmental projects in their role as student educators.

ACTION RESEARCH SNAPSHOT

20 Research participants

Q Questionnaires
Direct observation
Assessment review

3 Research cycles



	Round 1	Round 2	Round 3
Method	<ul style="list-style-type: none"> Initial questionnaire Exercise in calculating ecological footprint 	<ul style="list-style-type: none"> Round 2 questionnaire Exercise in calculating ecological footprint 	<ul style="list-style-type: none"> Final questionnaire Assessment review
Key Findings	<ul style="list-style-type: none"> Low sustainability literacy Limited understanding of scope of sustainability concepts 	<ul style="list-style-type: none"> Change in personal approach to sustainability Expanded understanding of the scope of sustainability concepts Interest in sustainability-focussed education for young children 	<ul style="list-style-type: none"> Students delivering sustainability education to young children



“Our sustainability cluster courses enable educators to deliver age-appropriate and engaging sustainability education to young children. It’s about empowering our pre-service educators to bring about change in our world.”

Dr Sharon Stuhmcke



REFLECTIONS

The research results show the need for highlighting the economic, political and social dimensions of sustainability in training to encourage pre-service educators to explore these dimensions, as well as environmental projects, in their final vocational placements. Stuhmcke also recommends that other researchers in this field use pre-service educators’ work samples (assessment) as evidence of the benefits and ‘do-ability’ of sustainability education in early childhood education settings.





REDSpace:

CENTRE FOR APPLIED RESEARCH AND INNOVATION

RedSpace: is TAFE Queensland's Centre for Applied Research and Innovation. It integrates the applied knowledge, skills and expertise of TAFE Queensland as the largest and most experienced provider of vocational education and training in Queensland. It will grow an organisational culture of applied research to strengthen our capabilities and enhance our engagement and innovation outcomes with communities and employers.

TAFE Queensland RedSpace: will enhance and support the proven capability and capacity of TAFE Queensland to deliver:

- Innovation in education through scholarly practice and applied research;
- Student learning outcomes through development of enterprise skills;
- The realisation of innovation in our organisations, our communities and industry.

The RedSpace: team provides leadership and coordination to a portfolio of services related to applied research and innovation. The CPAR program is just one example of RedSpace: in action. Another key RedSpace: service is ARIES: Applied Research, Innovation and Entrepreneurship Services. ARIES is TAFE Queensland's prime mechanism for enabling and leading innovation with industry, business and community through innovation partnerships.

For further information:



@TQRedSpace



tafeqld.edu.au/redspace

REFERENCES

Centre for Learning and Teaching, 2016, **TAFE Queensland learning and teaching framework**, Brisbane, TAFE Queensland.

Gibson, J 1977, 'The theory of affordances', in R Shaw & J Bransford (eds), **Perceiving, acting, and knowing. Towards an ecological psychology**, New Jersey, Lawrence Erlbaum Associates, pp. 67 - 82.

Kemmis, S & McTaggart, R 2014. **The Action research planner: doing critical participatory action research**, 1st edn, Singapore, Springer Verlag.

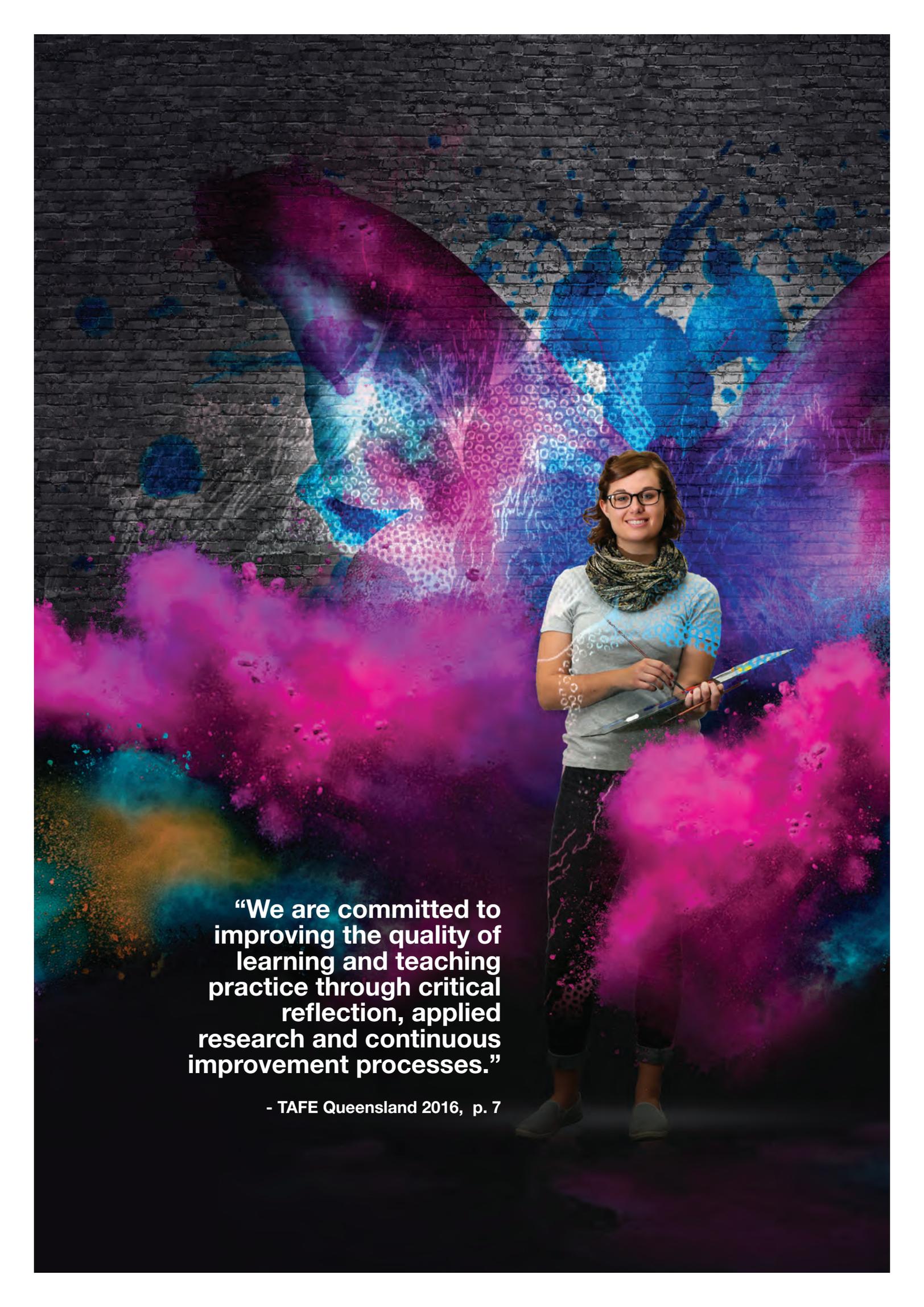
Lave, J & Wenger, E 1990, **Situated learning: legitimate peripheral participation**, Cambridge UK, Cambridge University Press.

Pramling Samuelsson, I & Kaga, Y (eds) 2008, **The contribution of early childhood education to a sustainable society**, Paris, UNESCO. [Online] Available at: <<http://unesdoc.unesco.org/images/0015/001593/159355E.pdf>> [Accessed 24 December 2015].

Schön, D 1983, **The Reflective practitioner: how professionals think in action**, New York, Basic Books.

United Nations, 2008, **The Gothenburg recommendations on education for sustainable development**. [Online] Available at: <<http://desd.org/GothenburgI%20Recommendations.pdf>> [Accessed 01 March 2016].

Vygotsky, L 1978, **Mind and society**, Cambridge MA, Harvard University Press, pp. 79 – 91.



“We are committed to improving the quality of learning and teaching practice through critical reflection, applied research and continuous improvement processes.”

- TAFE Queensland 2016, p. 7



REDSPACE:

CENTRE FOR APPLIED RESEARCH AND INNOVATION



[@TQRedSpace](https://twitter.com/TQRedSpace)



tafeqld.edu.au/redspace