Alison Owens, AUSTRALIAN CATHOLIC UNIVERSITY, alowens@acu.edu.au
Angela Daddow, DEAKIN UNIVERSITY, angela.daddow@deakin.edu.au
Georgia Clarkson, AUSTRALIAN CATHOLIC UNIVERSITY, georgia.clarkson@acu.edu.au
Duncan Nulty, AUSTRALIAN CATHOLIC UNIVERSITY, duncan.nulty@acu.edu.au

What is the Price of Excellence in Learning and Teaching? Exploring the Costs and Benefits for Diverse Academic Staff Studying Online for a GCHE Supporting the SoTL

ABSTRACT

In the wake of policy, technology, and ideological disruptions in Western higher education, it is in universities' interests to improve the quality of their learning and teaching to meet changed expectations. In some countries, particularly anglophone countries such as Australia, Canada, New Zealand, and the United Kingdom, the medium for this improvement is often professional development of academic staff provided through a Graduate Certificate in Higher Education (GCHE). This paper presents mixed methods research conducted at an Australian University. It addresses the questions of how a GCHE contributes to teaching quality and the Scholarship of Teaching and Learning (SoTL) from the perspective of course participants and their educators in the context of a university wide strategy to promote a culture of excellence in learning and teaching. Data and analysis indicate significant benefits to academic staff, their students, and the host institution from completion of a GCHE. However, tensions around academic workloads, compulsion, and some contradictions in espoused educational values and managerialist impositions emerge in these advancements. The educators in the GCHE (academic developers) were sometimes caught in the crossfire. Their reflections on this experience are included in the data and analysis.

KEYWORDS

academic development, graduate certificate in higher education, teaching excellence, Scholarship of Teaching and Learning (SoTL)

INTRODUCTION

Universities in Australia and other anglophone countries have increasingly mandated the completion of part, or all of, a Graduate Certificate in Higher (or Tertiary) Education (or Teaching) for academic staff. This is to ensure the continuing improvement of learning and teaching, which universities commit to as part of their quality assurance frameworks (Clarke and Llewellyn 2012, Simon and Pleschová 2012), and to further the objectives of SoTL. As there is considerable investment of financial, physical, and human resources required for this undertaking, ongoing evaluation of the impact and experience of this investment is a critical part of the quality assurance cycle. This study explores the extent to which this qualification, required of all teaching-focused academics at one university, adds

value to the academics, their students, and the institution from the perspective of participating academic staff and their educators.

The GCHE at the university in which this study was conducted integrates the teaching work of individual academics, requiring critical reflection and evaluation of their own practice. This includes implementation of theorised teaching innovations and scholarly research conducted for the purpose of dissemination. The study is essentially, therefore, an investigation into the institutionalisation of SoTL. Although it is 30 years since Boyer (1990) defined four quadrants to SoTL—*discovery*, *teaching*, *application* and *integration*—an agreed definition of SoTL remains elusive (Kern et al. 2015). The contemporary SoTL domain is described as 'internally diverse' and in need of a rigorous review of literature to define more precisely its practice not just as 'an idea' but a 'type of research of learning and teaching' (Chick, Nowell, and Lenart 2019). This study is situated within the SoTL domain as it investigates the inter-relationship of *acquiring* knowledge about teaching; *assimilating* that knowledge with one's existing understandings and experiences; and then *applying* learning to practice (Nulty 2019) in a critically reflective and scholarly manner through research that contributes to improved teaching practices and student learning outcomes (SoTL).

There is now a body of evidence that indicates that in-depth professional development programs in learning and teaching generate positive change in university teacher practices (Ginns, Kitay, and Prosser 2010). What is not as clear are the conducive circumstances that enable this change, and what might constrain them (Trigwell 2012b). Understanding the experiences of academic staff engaged in these programs is therefore of value to track impacts on learning and teaching, inform policy, and provide universities with return on investment information. Additionally, it assesses the andragogical value of the learning experience and its potential influence on collective practices in the collegiate discipline through enhanced SoTL.

In 2015, the vice chancellor of the university under study announced a strategic priority that endorsed, financed, and mandated the requirement for teaching-focused academics to complete a GCHE (or equivalent) within three years to develop ACU's 'culture of excellence' in learning and teaching. This priority extended funding and workload allowances to teaching academic staff (including sessional academics). This target mandated professional development that exceeded the minimum typically recommended for Australian academic teaching staff. It has been suggested that the imposition of the type of qualification in this study, albeit well-intended, is framed in a context of increased accountability and managerialist scrutiny that subjects academic work to neoliberal outcomes, and in the process undermines academic autonomy (Connell 2010). From an adult education perspective, an institutional 'requirement' can be at odds with the principles of andragogy. These principles assert that adults are intrinsically motivated to engage in learning when it is not only timely and relevant to their 'life worlds,' but is also 'self-directed' (Knowles 1984). On the other hand, mandating the qualification encourages good practice and scholarship in the changing and challenging context of university education teaching, and at no cost to participants. Through the teaching process, academic developers who taught the GCHE were anecdotally aware of some resistance to the imposition, b. ut were equally aware that many academics valued the qualification, they illustrated significant examples of changed teaching practices, and a number demonstrated active SoTL trajectories. This study sought to examine the academics' lived experience—including the intersection of the personal and professional—to give them a voice in the context of such tensions, and to examine to what extent their teaching practices had

changed and SoTL activity had increased. It was hoped this would indicate progress (or otherwise) toward excellence in learning and teaching from their perspectives, which ultimately it did.

LITERATURE REVIEW

For over two decades Australian higher education has been under broad and intense review. A significant focus of these rolling reviews (Dawkins 1988, Nelson 2003, West 1998) has been the participation rates of under-represented social groups, and funding mechanisms that might enable more equitable participation, culminating over a decade ago in the Bradley Review (2008). This focus reflects global trends to increase university participation and completion rates to ensure highly skilled working populations are able to engage with increasingly complex and diverse technologies, industries, and markets. This trend has contributed to increased numbers of students from diverse educational, cultural, and linguistic backgrounds enrolling in universities, which has challenged the preparedness of institutions and academic staff.

In the Australian higher education sector, these staff are themselves from increasingly diverse cultural and professional backgrounds, employed in differently categorised roles as permanent, contract and now, very frequently, as sessional academics (50-80 percent in Australian Universities) (Anon 2019; Lawrence and Hall 2018), and engaging with students in face to face, online, and blended formats. In addition, universities appoint staff to either teaching-focused, teaching and research, or research-intensive roles. Given this complexity, opportunities for the professional development of academic staff are valuable, if not critical. For teaching-focused staff, for example, professional development can and should explicitly support their 'continuing scholarship' in the SoTL domains to satisfy the conditions of the national regulator, Tertiary Education Quality Assurance Agency 2018 (TEQSA) Standard 3.2.3, as well as improve their practice and support career progression. It has been argued that such pressures associated with the "massification" of higher education (Akalu 2016, Altbach, Reisberg, and de Wit 2017) "*demand* a transparent approach to delivering quality that includes developing and supporting excellence in teaching," (Drew, Klopper, and Nulty 2015, 13). The research reported in this paper seeks to contribute to that transparency by investigating one example of institutionalised SoTL that aims to promote teaching excellence implemented in the form of a Graduate Certificate in Higher Education (GCHE).

In 2007, Denise Chalmers led *A Review of Australian and International Quality Systems and Indicators of Learning and Teaching* and argued that it is at the intra-institutional level where quality indicators "can be most usefully employed, and are most likely to lead to an enhanced learning environment which benefits students," (Chalmers 2007, 76). She noted further that the literature indicated that "evidence of a student-centered learning approach is perhaps the most strongly supported indicator of teaching and learning quality," (Chalmers 2007, 81). Most importantly, in the context of this paper, a student-centred learning approach is achieved through "providing the appropriate development opportunities, resources and support for teachers," (Chalmers 2007, 81). It has been argued that professional development for academic staff that engages teachers with influential theories and models of student learning can both enhance student learning and support the professional advancement of university educators in a changed environment (Braxton 2006, Chalmers 2007, Trigwell 2012a, Trigwell 2012b). If the criteria for desirable teaching characteristics are consistently

evident, a coherent, systemic and iterative cycle of performance-development and evaluation can exist to positively influence the quality of student learning across the institution.

At a minimum, most universities in Australia require the completion of a Foundations of University Learning module (Chalmers n.d., Tynan et al. 2009), which is normally embedded as a *single* unit of study in a GCHE comprised of three further modules. However, as it is noted that longer programs are more effective (Ginns, Kitay, and Prosser 2010), the completion of a sustained professional development program, such as four-unit GCHE, is the preferred approach.

The most recent report completed for the Australian Government Office for Learning and Teaching notes that there has been little discussion in the higher education literature of Graduate Certificate programs (Hamilton et al. 2014), others have argued the opposite earlier: the experience of academics' learning in Graduate Certificates, of navigating, reading, conducting research into their higher education practice and then writing about it, is now a reasonably well-researched phenomenon (Barradell et al. 2012, 13; Ginns, Kitay, and Prosser 2010).

Not only are there inconsistent views on how well the impact of a GCHE is understood, commentators in the sector may also express contradictory views on whether such professional development should be required or voluntary. In a commentary regarding the European higher education sector, Pleschová, Simon, Quinlan, Murphy, Roxå, and Szabó (2012) recommended the professional development of academic staff to 'elevate the importance of effective teaching in the university' (5), but proposed a voluntary system where graduates become 'champions' influencing other academics. However, Ginns, Kitay, and Prosser (2010) have pointed out that transfer of learning from university professional development programs for academic staff is conditional on a range of individual and organisational factors; cannot be assumed; and should be investigated to establish factors that impede and promote such transfer of learning to school and faculty. A recent Swedish study has found the positive impact of such professional development programs is differentiated for teachers with less or more than three years teaching experience and question the value of mandating such training for all teaching staff given this nuanced outcome (Ödalen et al. 2019). In the South African higher education context (Quinn 2017), many academic staff are described as welcoming professional development for teaching, but others remain "deeply suspicious of a move towards professionalisation of teaching," (70). The European Commission High Level Group recommended that all teaching staff in higher education institutions be pedagogically trained by 2020, effectively mandating professional development (Fahnert 2015). While debate over the (in)/voluntary nature of the professional development of academic staff conducted to generate and disseminate improvements in learning and teaching persists across the sector, the value of supporting greater professionalisation of teaching through organised and sustained development programs, such as a GCHE, is agreed (Daniels 2017).

Investigating and evaluating the impact of the deep and broad investment in the professional development of academic staff as represented in GCHE study programs remains a 'reflexive' priority for those interested in the scholarship of learning and teaching, as well as a quality measure for universities. Indeed, in 2014, the Office of Learning and Teaching recommended that universities should "identify and share successful implementation processes in a diverse range of university contexts, … and … develop a set of case studies detailing successful embedding of strategies/processes (for academic development)" (Chalmers et al. 2014, 6).

Through a consideration of broad and differentiated data drawn from learner accounts and texts, as well as demographic information, this paper reports mixed methods research that was completed to investigate how the professional development experience of a GCHE influenced teachers' perceptions of their own practice, and promoted the University's strategic priority to embed a culture of excellence in learning and teaching and promote the SoTL (Australian Catholic University 2019).

Defining teaching excellence in the context of the ACU GCHE

Teaching excellence is a contested concept and notoriously difficult to measure. Skelton (2005) proposes four dimensions of teaching excellence: 1) traditional, whereby learners are inculcated with an inherited body of knowledge; 2) performative, whereby successful graduates indicate 'a return on state investment; or standardised market-driven quantitative measures' (Wood and Su 2017, 454); 3) psychologised, where theories of learning (usually constructivist), and implications for teaching dominate; and, 4) critical, where understandings of teaching excellence associate it with the goals of freedom, justice and student empowerment (Skelton 2005). In 2005, Skelton claimed that the critical model was future orientated with little impact on higher education, which is at least partly qualified in 2020 with the increased recognition of other knowledges through indigenisation and internationalisation of curricula. Further, 'subversive knowledge' has been increasingly integrated into university discourse over many decades through women's studies, queer studies, post-colonial studies, among others. In the ACU GCHE, constructivist theories of learning were consistently embedded in resources, teaching strategies, and assessments. However, integration of a critical model was promoted through inclusion of First Peoples' perspectives and texts, and a strong emphasis on social justice aligned with principles of Catholic Social Teaching (Caritas Australia 2019). This program is therefore best defined as 'psychologised-critical' in relation to Skelton's model. As it was beyond the scope of this paper to measure the impact of the GCHE on teaching excellence across the university, this research focused on the perceptions of participating staff and the indications of improvements in teaching evident in their accounts and flowing from their course experiences.

Research questions

The research reported in this paper sought to answer the following questions:

1. How does formal professional development undertaken by academic staff as a Graduate Certificate in Higher Education contribute to improvements in teaching from the perspective of academic staff undertaking the course?
2. How do these accounts promote the University objective to develop a culture of excellence in learning and teaching?
3. How is the SoTL promoted by a GCHE?

METHODOLOGY

This research reports qualitative and quantitative data collected through a pragmatic research approach deploying mixed methods of data collection. The data are drawn from a single University (ACU) to explore the benefits and limitations of a formal GCHE model with potential to illuminate a topic that is of broad concern across the university sector. Decisions on what forms of data to include in a pragmatic approach to research are made based on outcomes from and consequences of the research

for a research population (Haight and Bidwell 2016; Watkins 2017) rather than any categorical features of the data itself. A mixed methods research approach is often selected for pragmatic research because it provides for triangulation of data (Yazan 2015) allowing researchers to confirm and validate research findings by reference to more than one form of data and also provides complementarity in results so that greater clarification of the research problem can be achieved (Hesse-Biber 2014; Sharon and Halcomb 2009).

Outcomes Based Teaching and Learning (OBTL) has been the dominant paradigm shaping higher education practices in Australia and other Anglophone countries for over three decades. OBTL generates extensive quantitative data in the form of assessment results, student retention and attrition information, and student evaluations of courses or teaching, for example, which provide a range of evidence of learning outcomes. Such quantified data is a common language to learning and teaching reporting and evaluation and can indicate trends and patterns relevant to understanding outcomes of this GCHE program. However, quantitative data alone provides only a limited understanding of the learning experience in the form of 'top down' data frequently compiled for external reporting rather than 'bottom up' data, which is deemed useful in exploring intra-institutional benefits (Chalmers 2007). To complement these more prolific OBTL data, this study is particularly interested in "bottom-up" qualitative data from participants in the GCHE and their educators (academic developers).

Rich sources of qualitative data flow from learning and teaching practices including the opinions and experiential accounts of both teachers and learners. The texts that participants submitted for assessment in the GCHE were focused on their developing professional practice, discussing and theorising specific strategies that they have applied in their teaching to improve student learning. The assessment task submitted in the final module of the GCHE, *The Scholarship of Teaching and Learning in Higher Education,* was selected for analysis as evidence of SoTL outcomes was available from this data, as well as reflection on the impact of the GCHE learning as a whole, in terms of knowledge and skills developed in the course and applied to practice. De-identified accounts drawn from these assignments are included as data reported in this paper. Prior to this research, the researchers (who also teach the course) read these assignments in the process of marking and gained a deep but informal understanding of the improvements, challenges, and issues associated with completing the course. These understandings inspired the research itself and were revisited in a critically reflective discussion between the authors/academic developers during data analysis. Notes from this discussion contribute further data and inform the discussion of results and implications.

Quantitative and qualitative data were collected through an anonymous online survey of participants of the GCHE (total enrolled:140), which was distributed after grading was completed for semester 2 in 2018, and after ethics approval for the research was achieved (2018-57E). The survey (see appendix) sought answers to 20 questions that targeted demographic information, as well as agree/disagree (Likert scale) responses and open-ended questions seeking written responses. A total of 46 responses were received (33 percent). In addition, ethics approval was also received to collect more extensive qualitative data through an analysis of the final written assignment submitted by participants as a critical reflection on their learning in the fourth unit. This provided insights from participants who had completed the entire course, which concludes with a SoTL unit requiring them to plan an investigation of the impact of innovations in their teaching that have been inspired by the course. The NVIVO

analysis of submitted assignments sought to identify repeated phrases, thematically aligned statements, and divergent or exceptional statements.

Background information on the Australian Catholic University (ACU) Graduate Certificate of Higher Education (GCHE)

ACU operates seven campuses across four states and one territory in Australia, plus a campus in Rome. It has a strong profile and reputation in the areas of nursing, allied health, and education. ACU uses an established *Teaching Criteria and Standards Framework* (Australian Catholic University 2017) and has extensive professional development support activities available to its staff provided institution-wide through its *Learning and Teaching Centre*.

The ACU GCHE is strongly constructivist, informed by classic theorists including Malcolm Knowles, Benjamin Bloom, William Perry, David Kolb, John Biggs, and Jack Mezirow. These are complemented by a range of authors providing a more contemporary and/or critical edge (including Blair and Collins-Gearing 2017, Brookfield 2017, Kong et al. 2017, and Yunkaporta 2009). Assessments consistently engage learners with their teaching practice, avoiding the criticism that in such programs "learning events are not necessarily connected in any meaningful way with the actual contexts and dilemmas of a professional's practice," (Fenwick in Daniels 2017, 173). Assessments include a statement of teaching philosophy, planning for theorised teaching innovations, redesigned unit outlines, a technology enhanced learning project, a SOTL research project, and a critical reflection rather than 'a series of essays, checklists and tick boxes' (Fenwick in Daniels, 2017, 173). This maximises the perceived and experienced relevance and value of these learning tasks in the here and now, as well as feeding into and supporting future practice (Boud and Soler 2016). Assignments are pass non-graded and, unsurprisingly, given the pre-existing academic skills of the teaching staff, the average pass rates for assignment work in the GCHE are very high (over 90 percent). The GCHE is delivered fully online and consists of four units undertaken in a part-time mode (one unit per semester) by teaching staff who may simultaneously have a fulltime, part-time or sessional teaching workload to complete. Fulltime teaching staff are provided 50 hours of teaching relief per semester of study. A single unit of the GCHE is estimated to require 150 hours of study. Currently, a total of 329 (continuing) teaching-focused staff are employed at the university. To date, 32 percent of these staff have graduated with the GCHE, nine percent are enrolled and 11 percent have completed part of the course, but are not currently re-enrolled. Sessional staff are also strongly encouraged to complete the GCHE and pay no fees for the course.

RESULTS
GCHE survey results

The first eight questions of the survey collected demographic information. The remainder of the survey posed 12 Likert-scale agree/disagree questions, five open-ended questions, and a free-text feedback section. The first open-ended question asked participants for the main reasons they enrolled in the GCHE. Responses were dominated by "an interest in teaching" and "improving their skills," but also regularly mentioned that their enrolment in the GCHE was "a requirement" and/or "part of their probation."

The following sample comments were of significance:

> *Mandatory for probation, but it was one of the things which attracted me to ACU.*
>
> *I was working in ACU as a sessional academic. The Department supported my tuition fees and this made it an easy decision to undertake the course.*
>
> *…the idea of it giving me a leg-up in learning how to teach at a level I hadn't taught at before. A secondary motivation was that it was paid for by the university - it would not have been attempted if I'd had to pay for it myself. After one semester of studying the GCHE I'm motivated by the tremendous breadth of information I've learned and the stellar changes it's made to my teaching during this first semester.*

Significantly, 21 respondents from 46 mentioned that their enrolment was a 'requirement,' 'compulsory,' 'mandatory,' 'probationary,' or they were 'forced to.' Of equal significance, this was rarely the only reason provided. Comments above are typical of many who were obliged to enrol, but also had an interest in this professional development opportunity to improve their teaching and their career options (for example, achieve continuing appointments).

In answer to Likert scale questions, 72 percent strongly agreed or agreed that the GCHE had positively influenced their teaching practice, and as a corollary 74 percent strongly agreed or agreed that they had evidence of positive changes in their teaching since commencing the GCHE. These ratings were particularly encouraging considering firstly, that so many of the respondents (64 percent) had only completed the first unit of the course (or were still completing it), and secondly (in response to a separate survey question) that 60 percent already felt their prior experience in teaching was adequate to make them a good teacher. Even more respondents, 82 percent, strongly agreed or agreed that adult learning theory presented in the units (especially the first unit) helped them build upon their teaching experience and develop further as a teacher. 79 percent of respondents strongly agreed or agreed that on their own reflection their teaching has improved since commencing the GCHE.

Despite these positives, the distribution of some results indicated that part of the student cohort (at least 10 percent of the student respondents) strongly disagreed with the majority. For example, while 56 percent thought the GCHE had successfully integrated their work with their learning, 11 percent strongly disagreed. The first unit is foundational and theory focused. It is designed to develop not only knowledge of adult learning theory, but also a habit of critical, scholarly reflection. A large majority of survey respondents agreed that the adult learning theories covered in this unit helped them develop as teachers. Several respondents expressed the view that the theories provided were not contemporary enough. This feedback was not unfamiliar to the academic developers teaching in the units from informal conversations. In their reflective conversations, they discussed the original course designers' assumption that many of the academics from a range of disciplines would not have had exposure to seminal theoretical literature in adult education. This included early theorists such as Jean Piaget and Lev Vygotsky, as well as more contemporary iterations of the developmental, constructivist process. Also recommended in the course was the SOLO (Structure of Observed Learning Outcomes) model (Collis and Biggs 1982) and Bloom's taxonomy (Krathwohl, Bloom, and Masia 1964), which are intrinsically tied to the Australian Qualification Framework (AQF) standards. Malcolm Knowles' (Knowles 1984) explication of andragogy and David Kolb's (Kolb 1981) model of experiential learning were also key

texts in the unit. Even though these theories underscore more 'contemporary' approaches for learning and teaching common in higher education, such as Problem Based Learning, Inquiry Based Learning, and Universal Design (see, for example, Duffy and Raymer 2010, 3; Metz 2006, 8), they are certainly not contemporary. More contemporary literature that also provided an alternative, Indigenous perspective to this predominantly 'white male' account of academic development was provided in each unit of the GCHE, such as through the work of Nerida Blair and Brooke Collins-Gearing (2017) and Tyson Yunkaporta (2009). Evident resistance to the theories because they are 'not contemporary' may reflect the emphasis that many academics, particularly in disciplines that are technology integrated, place on the currency of scholarship.

Many were not able to provide responses to a question asking them whether they based their views on improvements in their teaching based on 'feedback received from either students or colleagues.' This was because they were either still completing the first unit, not the recipients of standard student evaluation survey results, or never observed by colleagues. 'Isolation' was mentioned as an issue in three of the four comments provided about colleague feedback.

The impact of the GCHE emerged from these comments as work-relevant with clear application:

> *It really got me thinking about my teaching and how learning and teaching tasks are designed in tutorials.*

> *Practical application to the units that I was teaching. * Learning the theory behind learning and teaching for adults * Learning the learning and teaching 'lingo' to enhance confidence in academic discussions.*

In answer to the question "what were the biggest challenges for you in completing the GCHE," the problem of completing the course while also completing a heavy teaching commitment was identified by multiple respondents:

> *The most challenging aspects involved time and workload/life balance and … running the units [during] already heavily committed semesters.*

> *Finding the time. It was an extraordinarily challenging semester for me, with a young family, and high workload to contend with, I was burning the candle at both ends to get through.*

The following comment illustrated the particular tension between the provision of 50 hours of workload per unit to participants, when each requires 150 hours of study time:

> *I love this course, the intention—but it has taken a huge toll on my welfare and stress levels … Get us the time to do it well and properly and to then apply back to ACU so our students further prosper…*

Several respondents discussed the online mode of delivery as a limitation for them, however, the majority identified the most positive parts of doing the GCHE as: flexible online access, meeting and

engaging with colleagues, generous and responsive teaching staff, and good and accessible theoretical resources. Surprisingly, a desire for 'lecture-style, didactic/delivery style teaching' was expressed in surveys, notwithstanding the multiple provisions already incorporated in the GCHE teaching and materials.

In responding to the "anything to add" question, the comments included further responses about more time needing to be made available through greater workload relief. In addition, comments focused on: providing more choice about undertaking the course at all; mode of study, such as face to face or intensive; greater theoretical breadth; and contemporaneity.

There were strongly positive comments about the course and the teaching staff.

The GCHE lecturers are very approachable, capable, committed and so far, excellent role models for my own teaching practice.

I think this is a wonderful course. All lecturers should do it! It is disappointing that so many persons in charge of course/unit design and management don't seem to have done the course.

GCHE assignment analysis results

In addition to the surveys, to capture academics' experience at the end of the GCHE we analysed their final reflective assignment from the last unit of the course *The Scholarship of Learning and Teaching*. The focus here was to identify perceived improvements to teaching and to explore the implications of these perceptions for achieving 'excellence' in learning and teaching across the institution. The assignment task required the academics to write a brief reflection on their learning in the GCHE and their development in relation to Scholarship of Teaching and Learning (SoTL). A random selection of over 50 percent of the assignments (21 from a total of 42 submissions in a single semester) were analysed (using NVIVO 6) to identify repeated concepts, terms and themes before reaching data saturation.

A summary of the SoTL outcomes that flowed from the final unit of the GCHE for this cohort included planned research projects investigating a broad range of initiatives developed to improve student learning, including but not limited to: new approaches to group selection, student response system integration to lectures (Kahoots, Socrative, Mentimeter), simulation techniques for learning procedural knowledge, incorporating technologies such as Twitter or Padlet to enhance engagement and/or real world connectivity, flipped classroom approaches, chunked learning, and peer and self-assessment options. Suggested methods for collecting data to evaluate the impact of theorised interventions in these SoTL projects were strongly student-centred deploying student surveys, individual interviews, and focus group interviews (often in combination) to establish the student experience of new approaches and activities introduced by teachers. Several of the final unit participants applied for and were awarded internal Teaching Development Grants and/or Teaching Excellence Awards as a further sign of the positive impacts in SoTL drawn from the course.

All but one of the participants' accounts strongly affirmed that learning in the GCHE had significantly changed their teaching practices. Many described their adoption of more student-focused practices, including modifying assessments to maximise student learning, application of pedagogically informed uses of technology, using adult learning principles, and engaging in critical reflection that was

informed by theories they had learnt—and therefore engaging in a more scholarly approach to their practice. This was expressed by both novice and experienced academics. The following quotes from these reflections illustrate these claims:

> Before I started this course, I already had about 20 years of university teaching experience under my belt and had received several teaching-associated citations and awards. Consequently, and I am quite embarrassed to confess this, I was not sure if I would benefit from this course. Now, after completing four semesters and 13 assessment tasks, I am ready to admit that I was totally wrong—this course was a real eye-opener that helped me inform my teaching practices.

> Personally, the Graduate Certificate in Higher Education (GCHE) has provided a guided path to a novice understanding and ability to differentiate between 'good teaching', 'scholarly teaching' and 'SoTL'. I hope that now my practice as a teacher increasingly demonstrates SoTL. My progress through the GCHE has brought an understanding that teaching involves all faculty, instructors and graduate students under an institution's and government's policy framework engaging in teaching activities and how SoTL evidence informs and progresses it.

> …as a consequence of me sharing the ideas regarding this SoTL project, we have fortnightly meetings within our school to share our ideas in order to improve the teaching practices and the quality of our program.

This last extract was especially promising as it indicates that the GCHE has, at least for this individual, had the desired more general and extended effect of infiltrating and influencing others' practices, one mode of 'dissemination,' in Boyer's terms (Boyer 1990). Other practical examples of this were GCHE graduates being asked to write curriculum in recognition of their increased skills.

As these excerpts come from assignments that were not anonymous, and were marked by teachers in the GCHE program, it could be argued that the academics wrote what they thought the assessors wanted to hear. However, there were some excellent examples of changed practices outlined at times, and supported by evidence, such as changed student feedback, more enlivened learning experiences, and increased student attendances. For example:

> In practice, my SELTS (Student Evaluation of Learning and Teaching) improved the second time I taught [a unit] (after completing UNHE500), that student attendance kept around 70%+, and that my colleague who returned to teaching [the unit] this year is grateful for the material I developed.

> By exploring the whole learning environment and being more overtly aware of how my own behaviours influence the flow and depth of the course materials has resulted in my students being able to achieve better learning outcomes. This has been demonstrated by a change in my SELT comments and the number of students who have initiated independently emails, cards and gifts to show their appreciation.

> *Prior to UNHE501, if I had thought of designing a unit, I would have started with the content, chopped it up to fit the teaching weeks, then worked out how I might test the students' knowledge and understanding. This approach was upended by constructive alignment….*

These comments indicate an increased attention to student-centred practices (approaching curriculum design with student learning in mind rather than content, increased student attendance and positive indications in students' feedback), and a growing reflexivity.

DISCUSSION OF RESULTS

The predominant and consistent view from surveys and assignment data is that learning in the GCHE has significantly changed academics' teaching practices. Certainly, the survey data and comments from analysis of assignments reflect appreciation of the impact the course has had on approaches to teaching for both novice teachers and seasoned academics. Specifically, respondents are: more aware of and actively engaged in SoTL, experimenting with student-centred approaches to learning, more able to theorise their practice, and are engaging with other faculty in seeking to improve the quality of student learning. These are strongly desirable outcomes to academic development as defined by Clarke and Llewellyn (2012). Survey respondents were affirming of changes in teaching practices even quite early in the GCHE course. The comments extracted from the assignments tend to offer more specific evidence of impact, such as, student feedback/satisfaction, changes implemented, and so on. This possibly reflects the differential between the stage of completion of the course between survey respondents (which included those early in the course as well as those completing) and authors of the final assignment. Those at the final stages of the course had more access to additional evidence, perhaps than those earlier in the course. Certainly, the claims to changed teaching practices indicated from both data sets suggest more student-focused approaches in academics' teaching. For example, the stated awareness of using adult education principles, approaching curriculum design with student learning in mind rather than content, increased student attendance, and positive indications in students' feedback.

From their reflective discussions, the educators in the GCHE witnessed the transformational impact of the course for many academic colleagues through their teaching, and identified the disproportionately high percent of GCHE graduates who were achieving Teaching Development Grants (SoTL) and Teaching Citations and Awards within the university as examples of this positive impact. Assignment data consistently indicated increased understanding and motivation to engage in SoTL, promoting wider dissemination of changed practices. Both changed teaching practices and increased SoTL activity strongly suggest that undertaking the GCHE in this context has contributed to a "culture of excellence," as intended by the vice chancellor's strategic priority. Longer term studies would indicate to what extent, and in what ways, this has been sustained.

The data from survey respondents indicates that these benefits are somewhat in tension with the demands of actual teaching workload, and the time required for academic staff to complete formal study to (ironically) learn more about teaching. The strong theme in survey responses about the 'required'

status of their enrolment in the GCHE reflects tensions in the higher education sector between the commitment of universities to continuing improvement of learning and teaching, and the notion of academic freedom valued by scholars. This is an important perspective in the Australian context, given the professional development of academic staff (mandated by (TEQSA) Tertiary Education Quality Assurance Agency 2015). This has been reflected in the university sector in the GCHE space elsewhere (Hardy and Smith 2006).

The provision of the course at no cost to the participants was appreciated by many respondents in survey comments, and perhaps partly mitigates the dislike for the 'required' nature of enrolment for some. Their appreciation acknowledges the investment made by the University in their professional learning and potential career progression. The same degree of anxiety or resentment regarding the mandated study is not evident in the final assignments. In discussion, the researchers surmised that perhaps this reflects the heavier reading load of educational theory required in the first unit and the increasingly applied nature of the final unit where teachers innovate and evaluate their practice. In addition, the proximity of the possibly unwelcome directive to undertake this course for first semester participants, who made up a large proportion of survey respondents, may have contributed to this difference. Researchers discussed further their own discomfort with the mandated aspect of this professional development, with one stating, "effectively, we are the face of the mandate." They discussed the problematic impact of studying the GCHE in relation to academics' teaching workloads, the relegation of academic staff to the status of students (sometimes requiring the researchers/developers to fail colleagues), and the potential to promote expectations for conversion from casual contract to more permanent work status. The requirement to complete such a program of professional development is not problematic for 'participants' alone. Essentially, the teachers of the GCHE experience pastoral concerns and referred pressure as a consequence of the observed pressures imposed on colleagues. These realities are the subject of ongoing review by the academic developers, as they consider how to respond to these tensions through curriculum. One option currently being developed is a microcredential (short course of stackable options) version of the course.

Finally, the researchers discussed an apparent tension between the andragogical principle that adults are self-directed learners (Knowles 1984) and the required status of the course of study. As previously mentioned, this "required" aspect of the course is more of a focus in the data from the survey, which draws heavily on learners in the first unit, than it is in the assignment data collected at the end of the course. When Knowles writes about the need for adults to be seen by others as self-directed, he talks about the need for adult educators to create learning experiences that help transition adult learners from "dependent to self-directing learners," (Knowles 1984, 57) acknowledging that adult learners may revert to their (pedagogical) conditioning for dependency in education or training environments requiring teachers to "tell them what to do." There were requests for more conventional lecture and tutorial mode teaching expressed in the survey data, for example, that may reflect the difficulty of this transition for some. Further to this, the remaining five andragogical principles proposed by Knowles are strongly evident in the data drawn from the learners' assignments submitted at the end of the course. This data demonstrates that learners are "engaging their own teaching experience as resource for learning" (a real-life, problem-based focus: Knowles' Principles 3, 4, and 5), and acknowledging the positive impact of their learning on their changed approaches to teaching and curriculum design (addressing Principles 1, 2, and 6). While the data reflects some tensions around the (in)-voluntary nature of professional

development it does suggest that, from the institutions' perspective, the GCHE has indeed promoted improved learning and teaching practices for most of the staff undertaking the course and has developed their awareness of and competence in the SoTL domains.

Limitations of the study

A limitation of the survey data reported in this research was the large proportion of respondents who had not, in fact, completed the course but had completed only the first unit. As it is common in the Australian higher education sector to require academic staff to complete a single unit of a GCHE, often as part of probation, although this outcome represents a limitation to the research, it also reflects common practice in the sector and for the purpose of this study, was partly mitigated by the inclusion of assignment data from the final unit.

CONCLUSION

From the perspective of the researchers who also teach into the program, the results from this research indicate that professional development of academic staff undertaken in the completion of a GCHE can develop student-centred approaches to learning and teaching so strongly emphasised in Chalmers' (2007) review of Australian university practices. The results also show that the GCHE can help academics to respond in a theorised manner to the increasingly diverse student cohorts they now encounter in classrooms and online environments. The form in which such professional development is provided requires reflexive consideration by academic developers as a result of this research, to consider factors including academic workload (and potential burnout), early preferences for a blend of transmissive/traditional/face to face modes of teaching along with online options, and the complex dynamics of mandating of such professional development.

Returning to the overarching question of how completion of a GCHE contributes to a culture of excellence in learning and teaching, the authors adopt Nixon's reading of excellence (2007, 22) "as a process of growth, development and flourishing; … not just an endpoint" (Wood and Su 2017, 453) in concluding that this form of professional development contributes strongly to the ongoing project of developing and identifying excellence in learning and teaching at university. In particular, the capacity for teaching focused staff to implement innovations in their teaching that they theorise, investigate, and disseminate through SoTL has been enhanced.

ACKNOWLEDGMENTS

Alison Owens is a Senior Lecturer in the Learning and Teaching Centre at the ACU University and an adjunct Associate Professor (Education) at Central Queensland University. She holds dual PhDs (Education, Creative Arts). https://orcid.org/0000-0002-0000-2132.

Angela Daddow is a lecturer in Social Work at Deakin University, and a Senior Fellow of the Higher Education Academy. Her post-graduate qualifications in Social Work and Education often merge in her research interests. http://orcid.org/0000-0003-2666-7105.

Georgia Clarkson is a Senior Lecturer in higher education at the Learning and Teaching Centre at the Australian Catholic University. Georgia holds a PhD in educational sociology and a Masters in Education. https://orcid.org/0000-0002-9145-9356.

Duncan D Nulty is recognised for his expertise in tertiary education institution policy and practice, academic standards, curriculum design, and the evaluation of educational programs. He has a sustained record of excellence in academic leadership. http://orcid.org/0000-0003-0782-1613.

REFERENCES

Akalu, Girmaw A. 2016. "Higher Education 'Massification' and Challenges to the Professoriate: Do Academics' Conceptions of Quality Matter?" *Quality in Higher Education* 22, no. 3: 260–76. https://doi.org/10.1080/13538322.2016.1266230.

Altbach, Philip G., Liz Reisberg, and Hans de Wit. 2017. *Responding to Massification: Differentiation in Postsecondary Education Worlwide*. Hamburg.

Anon. 2019. "Casualisation of Academic Teaching." *The Saturday Paper*, June 27, 2019. https://www.thesaturdaypaper.com.au/opinion/topic/2019/07/27/casualisation-academic-teaching/15641496008514.

Australian Catholic University. 2017. "Teaching Criteria and Standards Framework." https://policies.acu.edu.au/learning_and_teaching/teaching_criteria_and_standards_framework.

Australian Catholic University. 2019. "Our Approach to Teaching and Learning." https://www.acu.edu.au/study-at-acu/why-study-at-acu/our-approach-to-learning-and-teaching.

Barradell, Sarah, Sarah Down, Damian M. Spencer, and Tai T. Peseta. 2012. "Negotiating New Research Identities through the Graduate Certificate in Higher Education." *HERDSA New* 34, no. 1: 13–14.

Blair, Nerida, and Brooke Collins-Gearing. 2017. "Reflective Practice: Ancient Wisdom and Practice–Australian Indigenous Reflections in Teacher Education Through Shared Storying." In *Reflective Theory and Practice in Teacher Education*, 63–83. Singapore: Springer.

Boud, David, and Rebeca Soler. 2016. "Sustainable Assessment Revisited." *Assessment & Evaluation in Higher Education* 41, no. 3: 400–413. https://doi.org/10.1080/02602938.2015.1018133.

Boyer, Ernest L. 1990. *Scholarship Reconsidered: Priorities of the Professoriate*. Princeton, New Jersey: The Carnegie Foundation for the Advancement of Teaching.

Bradley, Denise, Peter Noonan, Helen Nugent, Bill Scales. 2008. *Review of Australian Higher Education: Final Report*. Canberra: Department of Education, Employment and Workplace Relations. Retrieved from http://hdl.voced.edu.au/10707/44384.

Braxton, John M. 2006. "Faculty Professional Choices in Teaching That Foster Student Success."

Brookfield, Stephen D. 2017. *Becoming a Critically Reflective Teacher*. 2nd ed. New York: Josey-Bass.

Caritas Australia. 2019. "Catholic Social Teaching." https://www.caritas.org.au/learn/cst.

Chalmers, Denise. 2007. *A Review of Australian and International Quality Systems and Indicators of Learning and Teaching*. Canberra: Carrick Institute.

Chalmers, Denise. n.d. "Australian University Teaching & Criteria & Standards." http://uniteachingcriteria.edu.au/framework/indicative-criteria/indicative-standards-criteria/standards-criteria-criterion-6/.

Chalmers, Denise, Rick Cummings, Sofia Elliot, Sue Stoney, Beatrice Tucker, Rachel Wicking, and Trina de St Jorre. 2014. "Australian University Teaching Criteria and Standards Project." Sydney.

Chick, Nancy, Lorelli Nowell, and Bartlomiej Lenart. 2019. "The Scholarship of Teaching and Learning: A Scoping Review Protocol." *Teaching & Learning Inquiry* 7, no. 2: 186–97. https://doi.org/10.20343/teachlearninqu.7.2.12.

Clarke, Deborah, and Anne Llewellyn. 2012. "Examining the Efficacy of a Work-Based Learning Project: Preparing New Academics to Teach in Higher Education." *Asia-Pacific Journal of Cooperative Education* 13, no. 3: 147–58.

Collis, Kevin F., and John B. Biggs. 1982. "Description of the SOLO Taxonomy." In *Evaluating the Quality of Learning: The SOLO Taxonomy (Structure of the Observed Learning Outcome)*, 23–29. New York: Academic Press.

Connell, Raewyn. 2010. "The Neoliberal Cascade and Education: An Essay on the Market Agenda and its Consequences." *Critical Studies in Education* 54, no. 2: 99–112. https://doi.org/10.1080/17508487.2013.776990.

Daniels, Jeannie. 2017. "Professional Learning in Higher Education: Making Good Practice Relevant." *International Journal for Academic Development* 22, no. 2: 170–81. https://doi.org/10.1080/1360144X.2016.1261352.

Dawkins, John. 1988. *Higher Education: A Policy Statement*. Canberra.

Drew, Steve, Christopher Klopper, and Duncan Nulty. 2015. "Defining and Developing a Framework for the Peer Observation of Teaching." In *Teaching for Learning and Learning for Teaching: Peer Review of Teaching in Higher Education*, edited by Chistopher Klopper and Steve Drew, 13–34. Rotterdam: Sense.

Duffy, Thomas M., and Pamela L. Raymer. 2010. "A Practical Guide and a Constructivist Rationale for Inquiry Based Learning." *Educational Technology*.

Fahnert, Beatrix. 2015. "Teaching Matters—Academic Professional Development in the Early 21st Century." *FEMS Microbiology Letters* 362, no. 20. https://doi.org/10.1093/femsle/fnv156.

Ginns, Paul, Jim Kitay, and Michael Prosser. 2010. "Transfer of Academic Staff Learning in a Research-Intensive University." *Teaching in Higher Education* 15, no. 3: 235–46. https://doi.org/10.1080/13562511003740783.

Haight, Wendy and Laurel Bidwell. 2016. *Mixed Methods Social Work Research: Integrating Methodologies to Strengthen Practice and Policy*. Chicago: Lyceum.

Hamilton, Jillian, Mandy Thomas, Susan J. Carson, and Elizabeth Ellison. 2014. "Good Practice Report: Postgraduate Research and Coursework Degrees."

Hardy, Ian, and Erica Smith. 2006. "Contesting Tertiary Teaching Qualifications: an Australian Perspective." *Teaching in Higher Education* 11, no. 3: 337–50. https://doi.org/10.1080/13562510600680798.

Hesse-Biber, Sharlene Nagy. 2014. *Mixed Methods Research: Merging Theory with Practice*, New York: Guilford Publications.

Kern, Beth, Gwendolyn Mettetal, Marcia Dixson, and Robin K. Morgan. 2015. "The Role of SoTL in the Academy: Upon the 25th Anniversary of Boyer's Scholarship Reconsidered." *Journal of the Scholarship of Teaching and Learning* 15, no. 3. https://doi.org/10.14434/josotl.v15i3.13623.

Knowles, Malcolm. 1984. *The Adult Learner: A Neglected Species*. 3rd ed. Houston: Gulf Publishing Co.

Kolb, David A. 1981. "Learning Styles and Disciplinary Diferences." In *The Modern American College*, edited by Arthur W. Chickering. California: Jossey-Bass Inc.

Kong, Siu Cheung, Tak Lam Wong, Min Yang, Cheunk Fai Chow, and Ka Ho Tse. 2017. *Emerging Practices in Scholarship of Learning and Teaching in a Digital Era*. Singapore: Springer.

Krathwohl, David R, Benjamin S Bloom, and Bertram B. Masia. 1964. *Taxonomy of Educational Objectives: The Classification of Educational Gals*. New York: David McKay.

Lawrence, Jenny, and Gail Hall. 2018. "Understanding the Provision and Perceived Value of the Academic and Professional Development Practices of HE Teachers in College-Based Higher Education (CHE)." *Research in Post-Compulsory Education* 23, no. 4: 437–62. https://doi.org/10.1080/13596748.2018.1526903.

Metz, Steve. 2006. "Problem Based Learning." *The Science Teacher* 73, no. 8: 8.

Nelson, Brendan. 2003. Our Universities: Backing Australia's Future. Canberra.

Nulty, Duncan. 2019. "Strand 2, Module 1: Introduction to Key Principles." In *University Teaching: Core Skills*, edited by Epigeum. Oxford University Press.

Ödalen, Jörgen, Douglas Brommesson, Gissur Ó Erlingsson, Johan Karlsson Schaffer, and Mattias Fogelgren. 2019. "Teaching University Teachers to Become Better Teachers: The Effects of Pedagogical Training Courses at Six Swedish Universities." *Higher Education Research & Development* 38, no. 2: 339–53. https://doi.org/10.1080/07294360.2018.1512955.

Pleschová, Gabriela, Eszter Simon, Kathleen M. Quinlan, Jennifer Murphy, Torgny Roxå, and Mátyás Szabó. 2012. "The Professionalisation of Academics as Teachers in Higher Education." Strasbourg.

Quinn, Lynn 2017. "Understanding Resistance: An Analysis of Discourses in Academic Staff Development." *Studies In Higher Education* 37, no. 1: 69–83.

Sharon, Andrew and Elizabeth Halcomb. 2009. *Mixed Methods Research for Nursing and the Health Sciences*, Hoboken, New Jersey: Wiley Blackwell.

Simon, Eszter, and Gabriela Pleschová. 2012. *Teacher Development in Higher Education: Existing Programs, Program Impact, and Future Trends* NY, London: Routledge.

Skelton, Alan. 2005. *Understanding Teaching Excellence in Higher Education: Towards a Critical Approach*. New York: Routledge.

Tertiary Education Quality Assurance Agency. 2015. "TEQSA Higher Education Standards Framework 2015." Australian Government. Accessed June 6, 2018. https://www.teqsa.gov.au/higher-education-standards-framework-2015.

Tertiary Education Quality Assurance Agency. 2018. "Guidance Note: Scholarship." https://www.teqsa.gov.au/latest-news/publications/guidance-note-scholarship.

Trigwell, Keith. 2012a. "Evaluating the Impact of University Teaching Development Programmes Methodologies that Ask Why There is an Impact." In *Teacher Development in Higher Education: Existing Programs, Program Impact, and Future Trends*, edited by E. Simon and G. Pleschová, 257–73. NY. London: Routledge.

Trigwell, Keith. 2012b. "Scholarship of Teaching and Learning." In *University Teaching in Focus*, edited by Lynne Hunt and Denise Chalmers, 253–67. Camberwell: ACER.

Tynan, Belinda, Coralie McCormack, Marilyn Fisher, Margaret Zeegers, and Heather Sparrow. 2009. "GCTE: A National Graduate Certificate in Tertiary Education."

Watkins, Daphne. 2017. "Mixed Methods Research." *Encyclopedia of Social Work.* https://doi.org/10.1093/acrefore/9780199975839.013.989.

West, Roderick. 1998. *Learning for Life: Review of Higher Education Financing and Policy: Final Report*. Canberra.

Wood, Margaret, and Feng Su. 2017. "What Makes an Excellent Lecturer? Academics' Perspectives on the Discourse of 'Teaching Excellence' in Higher Education." *Teaching In Higher Education* 22, no. 4: 451–66. https://doi.org/10.1080/13562517.2017.1301911.

Yazan, Bedrettin. 2015. "Three Approaches to Case Study Methods in Education: Yin, Merriam, and Stake." *The Qualitative Report* 22, no. 2:134–52. https://nsuworks.nova.edu/tqr/vol20/iss2/12.

Yunkaporta, Tyson. 2009. "Aboriginal Pedagogies at the Cultural Interface." Professional Doctorate, James Cook University.

APPENDIX: ANONYMOUS ONLINE SURVEY QUESTIONS (QUALTRICS)

Q1	What is your role at ACU?
Q2	What is your level of appointment at ACU?
Q3	How many years have you been teaching in higher education?
Q4	How many years have you been at ACU?
Q5	What discipline do you undertake the majority of your teaching in?
Q6	How many units of the GCHE have you completed?
Q7	What is your gender?
Q8	Is English your first language?
Q9	What were your motivations for enrolling in the GCHE? You can list as many as you like.
Q10	My participation in the GCHE has positively influenced my teaching practice
Q11	I believe that my previous experience in teaching in higher education was sufficient to make me a good teacher
Q12	The application of adult learning theory assisted me to build upon my teaching experience and further develop as a teacher
Q13	To do the scholarship of L & T project in UNHE503, I drew on knowledge from the preceding GCHE units
Q14	I have evidence and examples of positive changes in my teaching practice since commencing the GCHE
Q15	My student feedback (formal and informal) leads me to believe my teaching practice has improved
Q16	Feedback from colleagues (peers and/or supervisors) leads me to believe my teaching practice has improved
Q17	My own reflection leads me to believe my teaching practice has improved
Q18	Aspects of the GCHE need to be changed to better support my needs
Q19	If you somewhat agreed or strongly agreed in question 18, in your opinion, what aspects of the GCHE curriculum, assessment or delivery need to change?
Q20	The effort to undertake the GCHE was worthwhile for you
Q21	The online learning mode met my learning needs

Owens, Alison, Angela Daddow, Georgia Clarkson, and Duncan Nulty. 2021. "What is the Price of Excellence in Learning and Teaching? Exploring the Costs and Benefits for Diverse Academic Staff Studying Online for a GCHE Supporting the SoTL." *Teaching & Learning Inquiry* 9 no. 1. http://dx.doi.org/10.20343/teachlearninqu.9.1.12

178

Q22	The course was successful in its objective to integrate my work with my learning
Q23	What was the most positive part of your GCHE experience?
Q24	What was the most challenging part of your course experience?
Q25	Is there anything else you would like to tell us?