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Beyond the Program, Beyond the Individual: Impact of a University Medical Teacher Development Program on Practice

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A thesis submitted in fulfilment of the requirements for the degree of

Doctor of Philosophy

Faculty of Health Sciences

The University of Sydney

Declaration of Originality/Authorship

I, Jenny Pizzica, declare that the research presented here is my own original work and has not been submitted to any other institution for the award of a degree.

Any help I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signed:	Jenny Pizzica

Date: 13/05/2016

Abstract

This study investigates the impact of a University Teacher Development (UTD) Program. It explores how a cohort of medical educators who completed a Master of Medical Education degree are facilitating change in their own workplaces several years after graduating. The experiences of these participants elicits a new meaning of program impact as a longer-term, negotiated, socially situated phenomenon of shifts in the teaching and learning practices of workgroups and organisations. In this sense, UTD program impact occurs both beyond the individual and beyond the program.

UTD programs are now commonplace in Australia. With the increasing regulation of teaching quality in higher education, governments and universities are seeking indicators of quality such as the number of staff who complete UTD programs and evidence that these programs 'work', to justify the time and resources allocated to their continuation.

This study analyses participants' experiences of program impact one to three years after completing a UTD program. This analysis identified that impact, as a longerterm phenomenon, is best understood as being socially negotiated and contested and requiring interactions with students, with colleagues and with the profession. This suggests that understanding the impact of a UTD program requires investigation over time, not just at the point of graduation. It also requires an interpretation of longerterm impact through shifts in educational practice within organisations, not only changes in individual attitudes and approaches.

This study advocates for a methodological approach in which a hermeneutic process is used to distil the essential elements of participants' accounts and a practice theory lens to make sense of those elements. This approach facilitates engagement with the experiences of program participants to form a complex understanding of the impact of the program on them and on the organisations in which they operate.

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Table of Contents

Abstract	iii
Acknowledgements	iv
List of Figures	ix
List of Tables	X
Chapter 1 Introduction	1
1.1 Why Evaluate UTD Programs?	1
1.2 Finding a Compelling Way to Talk about Impact	2
1.3 What Will be Evaluated	3
1.4 Research Methodology and Questions	3
1.5 Organisation of the Thesis	4
Chapter 2 Literature Review	6
2.1 The Prosser and Trigwell Model	8
2.1.1 Applications and critiques of the Prosser and Trigwell model	9
2.2 External Drivers for Review of UTD Programs	14
2.3 The Kirkpatrick Model	18
2.3.1 Adaptations and critiques of the Kirkpatrick model	20
2.4 The Canberra Model	24
2.4.1 Adaptations and critiques of the Canberra model	27
2.5 UTD Program Impact Beyond Graduation	29
2.6 Influence on Organisational Networks and Practices	
2.7 Summary	41
Chapter 3 Methodology	44
3.1 Interpretative Hermeneutic Phenomenology	45
3.2 Interpretative Hermeneutic Phenomenology in Health Research	46
3.3 Research Process	49
3.3.1 Stage 1: Orienting to the phenomena	50
3.3.2 Stage 2: Clarifying understanding through dialogue with participat	nts52
3.3.3 Stage 3: Gaining understanding of the whole text	57
3.3.4 Stage 4: Interpretive writing and thematic grouping	59
3.4 Ethical Considerations	64
3.5 Summary	65

Chapter	4 The Program and Participants	.67
4.1 T	he Master of Medical Education Program	.67
4.2 C	omparison with Central UTD programs	. 70
4.3 P	rogram Graduates who Participated in this Study	. 72
4.4 7	The Academic Medical Educators: Omera, Naveen and Tara	.75
4.4	.1 Omera	.75
4.4	.2 Naveen	.75
4.4	.3 Tara	.76
4.5 T	he Clinical Educators: Ruth, Nicole, Baden and William	.76
4.5	.1 Ruth	.77
4.5	.2 Nicole	. 78
4.5	.3 Baden	. 78
4.5	.4 William	. 79
4.6 P	articipants with Reduced Responsibilities in Education: Tracy and Paul	. 80
4.6	.1 Tracy	. 80
4.6	.2 Paul	. 80
4.7 P	rogram Epilogue	. 81
4.8 S	ummary	. 81
Chapter	5 Interactions with Students	.85
	ecognising Uncertainties and Fear	
5.2 D	iscerning and Rethinking Dominant Approaches to Teaching	. 88
5.3 C	reating Active Learning Opportunities	.90
5.4 L	imited Changes in Interactions with Students	.98
5.5 S	ummary	101
Chapter	6 Interactions with Colleagues	104
-	mpowered Connectivity with Colleagues	
	mpowered Connectivity with Committees	
	onflict, Resistance and Inertia from Colleagues	
	onflict, Resistance and Inertia from Committees	
	ummary	
	7 Interaction with the Professions	
-	hanges in the Status of Education within the Organisation and	140
	sion	1/17
110108	31011	14/

7.2 Changed Sense of Self as Educator in a Legitimate Endeavour
7.3 Growing Engagement in Formal Qualifications in Education157
7.4 Disengaging from the Profession
7.5 Summary
Chapter 8 Discussion
8.1 Impact on the Individual
8.1.1 The program changed participants' understanding of teaching and
learning
8.1.2 The program changed participants' understanding of teaching and
learning and they subsequently changed what they did in their own
classrooms
8.1.3 The program changed participants' understanding of teaching and
learning but they felt they could not use their understanding in their work
roles
8.2 Impacts Beyond the Individual
8.2.1 The program changed participants' understanding of teaching and
learning and their actions affected what other people thought and did. 177
8.2.2 The program changed participants' understanding of teaching and
learning and they worked with colleagues to introduce changes to
education practices in their organisations
8.2.3 The program changed participants' understanding of teaching and
learning but this understanding was contested by colleagues and their
changes to educational practices were resisted in their organisations 181
8.3 Implications for the Evaluation of the Impact of UTD Programs
8.4 How can a Hermeneutic Methodology Inform Future Evaluations?
8.5 Concluding Remarks
References 192
List of Appendices
Appendix A Information Sheet
Appendix B Informed Consent Document216
Appendix C Participant Demographics Form219
Appendix D Email to Supervisors

Appendix E Interview Guide	
Appendix F Ethics Clearance	
Appendix G Training and Career Paths in Medicine	

List of Figures

Figure 2.1.	Model of Teaching and Student Learning (Prosser & Trigwell,	
	2006)	8
Figure 2.2.	Canberra Model of UTD Program Outcomes and Impact. From "UC GCHE evaluation framework: Impact and outcomes	
	dimensions" by McCormack et al., 2009	25
Figure 2.3.	Macro and constituent micro systems in tertiary education (Biggs, 1993).	34
Figure 2.4.	Diagrammatic representation of Lave's (1996) social practice theory of learning	39
Figure 3.1.	Example of casebook extract of individual in context	58

List of Tables

Table 2.1	Kirkpatrick's Levels of Evaluation of Program Impact
	(Kirkpatrick, 2008; Kirkpatrick & Kirkpatrick, 2014) 19
Table 2.2	Comparison of Kirkpatrick Model Adaptations from Education
	and Health Programs
Table 2.3	Factors Affecting UTD Program Impact Identified by Stes et al.
	(2007)
Table 3.1	Comparison of Hermeneutic Research Studies in Health
Table 3.2	Example of Illustrative Excerpts by Element and by Individual
Table 4.1	Program Award, Credit Points and Duration
Table 4.2	Master of Medical Education: Key Concepts and Subjects70
Table 4.3	Socio-Demographic Characteristics of Participants73
Table 4.4	Time Elapsed between Start/End of Program and Study Interview 74
Table 4.5	Characteristics of Participants, Role at Time of Interview and
	Changes in Role since Graduation

Chapter 1

Introduction

This thesis evaluates the impact of university teacher development (UTD) programs through a close examination of one such program. The study explores participants' experiences of working in their home institution following completion of a Master of Medical Education at the University of Sydney. Program participants were medical practitioners and medical educators, including teachers of medical students in university teaching hospitals. The program's philosophy and structure closely mirrored centrally run UTD programs, with graduates completing modules in student learning, the scholarship of teaching and learning, evaluation, assessment and curriculum design. Learning activities encouraged critical analysis, reflective practices and negotiated project work.

When the research commenced in 2007, the program was a core responsibility of the university's Medical Education Unit and I was the coordinator of the program. I write of the program in the past tense, however, because in 2009 the university's medical faculty undertook an internal review and, when the program lost the support of the incoming faculty leadership, it was discontinued in 2010. Although the program and unit have been disbanded, it is still useful to look at the longer-term impact of the program and draw conclusions from this about the value of UTD programs in general.

1.1 Why Evaluate UTD Programs?

In Australia, the United Kingdom and Europe, it is becoming increasingly common for universities to provide formal university teacher development programs to new staff as a means of preparing them for their teaching responsibilities and to enhance the overall quality of learning and teaching. As staff participation in these programs has become a common institutional expectation, the higher education sector has increasingly questioned whether such programs have the expected impact on quality. It is timely, therefore, to investigate the value and long-term impact of UTD programs.

1.2 Finding a Compelling Way to Talk about Impact

UTD programs and the learning and teaching units that run them perform much of their work as an institutional service. This is an area of activity that has struggled to achieve recognition and support in universities, particularly in the current era of performance measurement and efficiency targets (Macfarlane, 2007). It is not uncommon for university learning and teaching units to be restructured and programs cut. As university budgets tighten and missions change, staff development programs find it difficult to report their outcomes or purpose in a compelling manner. Nonetheless, formal development pathways for university teachers continue to be recommended in commissioned reports in the sector as a means to improve the quality of universities (European Commission, 2013).

A way needs to be found of talking about the developmental impact of such programs that is meaningful to the mission of institutional service rather than limiting the conversation to reports of immediate gains and before/after measures of knowledge accumulation, as occurs in private sector training programs.

Although the Master of Medical Education program that I coordinated received positive feedback from participants, I had questions about whether and how participants would be able to effect change in their workplaces. During the program, many participants had begun projects or developed plans for changing assessment and other aspects of curriculum in their home institutions. Most participants worked in hospital settings and I questioned whether the plans these participants made for developing curricula and for changing teaching and assessment practices would endure beyond graduation. Hospitals are widely recognised as conservative organisations and I was concerned that participants would not have the support to continue these projects. Without the support of their colleagues and organisations, participants could find it difficult to implement their plans and could become frustrated and disillusioned if they experienced intractable opposition to their ideas. This would severely limit the long-term impact of the program and justifiably call into question its reason for existence.

1.3 What Will be Evaluated

This study explores participants' use of concepts from the program some time after they graduated. As I explain in Chapter 2, existing research on UTD programs has tended to use 'before' and 'after' reports of outcomes. That is, the studies compare measures from participants just before and immediately after they have completed the program. This study, however, collected data from participants one to three years after they completed the program. Delaying the evaluation in this way acknowledges that it can take some time for participants to develop and incorporate concepts from the program and embody these in their work. This longer-term view also allows a more detailed understanding of the program's impact on the participants' teaching careers, as it studies them when they are more deeply embedded in their work contexts.

1.4 Research Methodology and Questions

This study is necessarily exploratory and inductive in nature. I have sought to identify the impact of the program through an in-depth analysis of the diverse experiences of nine participants collected through semi-structured interviews and, in keeping with a hermeneutic approach, reflection on my own position as a researcher, academic and UTD convenor (see Chapter 3). On average, 3.5 years had elapsed between the time a participant had commenced the program and the time of our interview. When participants recalled how and whether concepts from the program had influenced their work, they drew on a much wider range of experiences than is evident in other research on UTD programs (see Chapter 2). Previous research focused on evidence collected from participants at the completion of the program and tended to concentrate on their *teaching* work alone, that is, the effect of the program on their interaction with students. Findings from this study, however, indicate that the scope of their education work was broader than this and included interactions with colleagues and the wider profession.

Rather than excluding the diverse forms and contexts of education work and focusing on a single, quantifiable measure of program impact, I chose to analyse this diversity and relate it, in a hermeneutic turn, to a more critical interpretation of program impact. I began with an understanding of impact as the influence of the program on individual participants and their work in their home institutions, but I ended with a new understanding of impact not only in terms of individual experience of the program but also how this relates to the collective education practices in participants' institutional contexts over time.

Accordingly, this thesis addresses the following broad question:

What is the long-term contextual teaching and learning impact of a university teacher development (UTD) program in medical education and how do we evaluate that impact in a compelling manner?

Specific sub-questions were:

- What impacts can we identify for the individual who has completed a UTD program in medical education – specifically the University of Sydney Master of Medical Education program?
- 2. What impacts can we identify at the departmental, faculty, institutional and professional association levels or contexts two or more years after participants have completed this UTD program in medical education?
- 3. What does this tell us about the evaluation of the impact of UTD programs in general?
- 4. How can a hermeneutic methodology inform future evaluations?

1.5 Organisation of the Thesis

Chapter 2 reviews relevant literature on the rationales, philosophies and imperatives behind UTD programs and examines research on the impact of such programs.

Chapter 3 describes the methodological approach adopted in the study and Chapter 4 introduces the medical educators who participated.

Chapters 5, 6 and 7 present the study's findings, organised around three central concerns. Chapter 5 focuses on the changes participants identified in their interactions with students and in their own teaching and learning activities in localised environments such as tutorials, lectures and one-to-one teaching sessions.

Chapter 6 focuses on changes in participants' interactions with colleagues and the ways in which changes to teaching practices were mediated—and often contested by departmental colleagues within their institutions. Chapter 7 explores the more abstract central concern of participants' changed interaction with the profession of education in medicine.

In Chapter 8 I analyse the findings, discuss and evaluate alternative theories and models for exploring the effects of UTD programs and suggest directions for future research.

Chapter 2

Literature Review

Many higher education research studies have sought to show that university teacher development (UTD) programs have a positive impact on the quality of university education. Yet debate continues among higher education commentators and researchers about how UTD programs contribute to quality improvement and what constitutes satisfactory evidence of program impact on the quality of university education. In this chapter, I examine three important approaches that have underpinned evaluations of the impact of UTD programs in higher education. In the terminology of the area, these approaches are referred to as models. The first is a pedagogical model of learning and teaching, chosen as it is commonly used in both the design and evaluation of UTD programs. The second is an evaluation model of program impact, chosen because it is frequently used to articulate multi-level effects of education programs. The third model, whilst not yet commonly used, offers the potential for a deeper evaluation of the longer-term impact of UTD programs. As models, they identify different elements that explain program impact and identify how these elements are interconnected. This review of such models establishes the background for the present study, which examines participants' experiences of a UTD program in medical education.

Researchers have reported on the impact of UTD programs on the quality of university education by focusing on changes in individual teachers' conceptions of learning and teaching (Gibbs & Coffey, 2004; Postareff, Lindblom-Ylänne, & Nevgi, 2007; Prosser, Rickinson, Bence, Hanbury, & Kulej, 2006). In these studies, impact was typically assessed via reported changes in teachers' approaches to teaching, which were then related to improvements in the learning outcomes of their students. In higher education, improvement in student learning is an important and widely accepted indicator of quality (Prosser, 2013). Those studies remain important because they used an explicit theoretical model of learning and teaching to show that teacher participation in UTD programs had a positive impact on student learning and, hence, on the quality of higher education. The model of learning and change they advanced continues to be regarded as credible by the higher education community.

Other changes that have been reported for individual teachers following participation in a UTD program include improvements in confidence, self-efficacy, selfawareness, self-scrutiny, and improved teaching, presentation and feedback skills (e.g. Knight, 2006; Prebble et al., 2005; Stes, Min-Leliveldb, Gijbelsa, & Van Petegem, 2010; Parsons, Hill, Holland & Willis, 2012)

Questions have been raised about the long-term sustainability of the reported impact of UTD programs on quality improvement in higher education (Gibbs & Coffey, 2004; Prosser, Rickinson, Bence, Hanbury, & Kulej, 2006; Pleschová & Simon, 2013). Program impact has most often been identified through analysis of snapshot data from participants immediately after they completed the program (Parsons et al., 2012). Gibbs and Coffey (2004) and Prosser et al. (2006) predicted that teachers would continue to implement ideas and changes, for instance to curriculum and assessment, beyond the end of the program. This prediction, however, has been minimally tested through follow-up research. This might have led to a partial or potentially misleading picture of longer-term impact. As Parsons et al. (2012) have suggested, program leaders and policy makers may be "making judgements on future investments or delivery approaches based on unsound or premature evidence" (p. 31).

Participants' post-program experience of implementing change remains an underresearched topic. Some researchers have argued that the theoretical models of learning and teaching that have been used to good effect in analysing program impact on participants at the end of the program might not be adequate for longerterm analysis of impact since changes have to be implemented within a departmental environment. Accordingly, models that focus on change in an individual's approach should at least be supplemented by theoretical models that situate knowledge and change processes within social settings. Changes in curriculum and assessment, for example, tend to be negotiated and sometimes mandated, which requires interaction with colleagues and committees. A socio-cultural theory of change would provide the necessary analytic power for the investigation of UTD program impact on institutional education practices and contexts over time. Several relevant models, which interpret learning and change as a social rather than individual phenomenon, have been suggested. Few, however, have been applied to research on UTD program impact.

This chapter begins by reviewing research on UTD programs in which impact is reported in terms of changes in individual participants' approaches to teaching and learning. This is followed by an exploration of the idea of conceptualising impact as changes in collective networks and practices.

2.1 The Prosser and Trigwell Model

In higher education, the effects of UTD programs are often understood through the Prosser and Trigwell (2006) model of teaching and learning (Figure 2.1). This model was derived from prior research that identified the qualitatively different ways in which students approached their learning and the qualitatively different ways in which teachers approached their teaching. In this model, an individual's approach to teaching and learning is connected to her/his perceptions of context, and perceptions of context are in turn related to both the characteristics of the student or teacher and the course and departmental learning context. In Figure 2.1, the column on the left represents the characteristics of the student, the context and the teacher. The second, third and fourth columns represent perceptions, approach and outcomes, respectively.

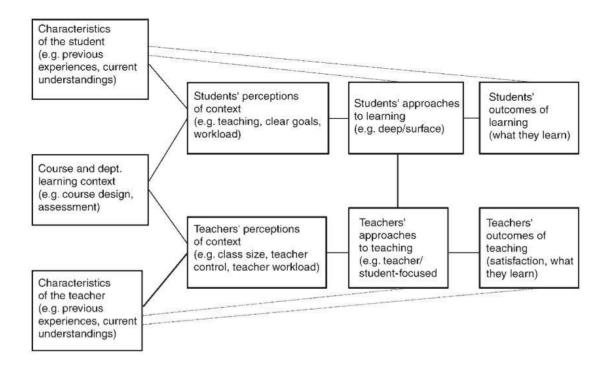


Figure 2.1. Model of Teaching and Student Learning (Prosser & Trigwell, 2006). Reprinted with permission.

Identifying conceptual shifts in teachers' approaches to teaching and learning has become a common UTD program evaluation method. In the three studies reviewed below, this conceptual shift is measured by a standard inventory, the Approaches to Teaching Inventory (ATI), developed by Trigwell and Prosser (2004). This inventory was intended by its authors to classify qualitative differences in how teachers approach teaching situations. It was not intended to assign inherent or immutable characteristics to teachers but to highlight that, in particular situations, teachers and their students adopt certain approaches to teaching and learning (Trigwell, 2012).

The ATI is a survey instrument containing 16 items across four subscales that are designed to elicit an understanding of teachers' approaches to their teaching. It was revised and expanded to 22 items in 2005 (Trigwell, Prosser & Ginns, 2005). The four subscales work as two pairs: an information transmission/teacher-focused approach and a conceptual change/student-focused approach. The items are statements about teaching that were distilled from interviews with staff (Trigwell & Prosser, 2004; Trigwell, Prosser & Ginns, 2005). The ATI includes behavioural statements such as: "In teaching sessions for this subject I use difficult or undefined examples to provoke debate" and attitudinal statements such as: "I feel that it is better for students in this subject to generate their own notes rather than always copy mine". Respondents can indicate their reaction to the items on a five point Likert scale from 1 "only rarely true in this subject" to 5 "always true in this subject". The survey has been validated and used extensively in universities throughout the world over the last 10 years (Goh, Wong & Hamzah, 2014; Stes, De Maeyer & Van Petegem, 2009; Stevenson & Harris, 2014).

2.1.1 Applications and critiques of the Prosser and Trigwell model

The need to prove that teachers change their understanding of and approach to teaching for the better as a result of their university's designated teacher development program has been a key concern in the higher education research literature. This has led to a consensus within the higher education community that UTD programs will change participants' conceptions of teaching. Three studies are often cited as underpinning this consensus: Gibbs and Coffey (2004), Prosser et al. (2006) and Postareff et al. (2007). Each of these studies is examined in more detail below.

Gibbs and Coffey (2004) evaluated UTD programs across eight countries, including Australia and the UK, by surveying 235 participants. Prosser et al. (2006) evaluated UTD programs in 32 universities in the United Kingdom, surveying 391 participants. Postareff et al. (2007) evaluated several UTD programs offered at a single university, the University of Helsinki, through a survey of 200 participants.

All three studies confirmed that participants in their university's designated teacher development program changed their conceptions of teaching, favouring approaches that are known to improve the quality of student learning outcomes. This change was scored using the Approaches to Teaching Inventory, where participants' responses on the inventory were significantly less 'teacher-focused' and significantly more 'student-focused' following the UTD program. That is, participants, according to their responses on the inventory, moved away from approaching their teaching with the aim of a teacher-directed transfer of information to students and moved towards seeing teaching as being focused more on what the student does to learn and on creating supportive environments in which students develop their own understanding of concepts.

Gibbs and Coffey (2004) examined the ATI results of 104 teachers at the time they entered their university's voluntary teacher development program and one year later. The UTD programs included in the study varied in length from four to 18 months. The results showed a significant difference in approaches to teaching after one year. Respondents moved towards more student-centred approaches and away from more teacher-centred approaches, whereas a small control group of 33 teachers who had not participated in a UTD program showed a move in the opposite direction. The sample size of the control group, however, was considered too small for the results to be considered significant.

An extensive literature in tertiary education has identified qualitatively different approaches to learning amongst students and has demonstrated a relationship between approaches to learning and learning outcomes (Trigwell & Prosser, 1991). Students who adopt a 'surface' approach engage with their studies in a less meaningful way, focussing on assessment and resorting to strategies such as cramming and rote memorisation to pass. By contrast, students who adopt a 'deep' approach, in which they engage meaningfully with their learning environment, have a more lasting and transformative learning experience and improved learning outcomes. Needless to say most UTD programs encourage participants to develop strategies that encourage their students to adopt a deep approach.

In the Gibbs and Coffey study (2004), student ratings of the teaching skills of participants in the UTD group (enthusiasm, organisation, group interaction, rapport, breadth) increased significantly after a year. More importantly, the students' approach to learning showed a complementary shift towards that of the participants. That is, as participants moved away from a teaching-centred approach and towards a more student-centred approach, students of the UTD program participants adopted less of a surface approach to their learning after a year and made a small, albeit non-significant movement towards a deep approach to learning in the same period.

The student ratings of the control group of teachers who had not participated in a UTD program showed no significant change in their rating of their teacher's skills except on the group interaction scale, where the students scored the control group's group interaction skills lower at the end than at the start of the year. The students of the control group of teachers showed no significant change in their approaches to learning.

The second study (Prosser et al., 2006) also used the ATI survey. The study found a significant shift away from teacher-focused approaches to teaching amongst UTD participants (391 teachers across 32 universities in the United Kingdom) and a significant shift towards student-focused approaches to teaching. Unlike Gibbs and Coffey (2004), Prosser et al. (2006) did not collect data from the participants' students but they did collect feedback on the participants' experiences of the UTD program, which was analysed against program outcomes. A cluster analysis of the feedback showed that participants who rated their experiences of the program most positively had the largest change away from teacher-focused and towards student-focused approaches to teaching. That is, the greatest change in approaches to teaching occurred among participants who rated the program as relevant and useful to their work in both their discipline and institution and reported that the program workload was manageable and appropriate.

The third study (Postareff et al., 2007), which used the same ATI as the previous two studies, did not present as clear a picture of change as the other two studies. The authors examined the ATI results of 164 teachers who had completed the University of Helsinki's teacher development programs and those of a control group of 36 teachers who had not. The study investigated the relationship between participants' approaches to teaching, the duration of the development program they undertook and how much teaching experience they had. The study did not examine any effects on students. The results showed that the duration of the development program had an impact on changes in participants' approaches. Only participants who had completed a UTD program of a year or longer were less teacher-focused and more student-focused than the control group. The participants who completed short-course development programs (less than a year) showed no difference to the control group in either their teacher or student focus. Even after adjusting the results for years of experience, the ranking remained the same.

A follow-up study of the same participants two years later (Postareff, Lindblom-Ylänne, & Nevgi, 2008) showed that participants who undertook further courses in the university's UTD program continued to become more student-focused in their approaches than they had been at the end of the previous study. The teachers who had not undertaken any further development courses in the intervening period showed no further changes on either the student-focused or teacher-focused scales. This follow-up study had only 80 participants (compared to 164 in the original study). This meant that there were very small sample sizes in a number of the subgroups based on hours of training and hours of experience, hence the results were less meaningful. Clearly, survey methodology works well for a snapshot at the immediate end of a program but the drop-off rate in follow-up studies after some time has elapsed makes it difficult to evaluate post-program effects.

The three studies reviewed above provide evidence of changes in participants' approaches to their teaching and some evidence of changes in the learning outcomes of the students of these participants. The findings confirm that the underlying mechanism of change in participants' approaches is a change in their *perceptions* of the circumstances that form the setting for their teaching (i.e. the teaching context), as proposed in the Prosser and Trigwell (2006) model. According to this model,

change in perceptions emerges from changes in factors associated with the individual teacher and factors associated with the course and departmental learning context.

Changes in a participants' perceptions of teaching contexts and changes in their approaches to teaching and learning do not of themselves provide evidence of whether these changes had any effect on the education practices of their department or institution. Despite the evidence from large-scale studies that confirms the change in participants' approaches, it is difficult to show how—or indeed whether—formal professional development of university teachers has an impact on the organisations in which they work (Knight, 2006; Parsons et al., 2012; Pleschová & Simon, 2013). According to Ramsden (2006), sustainable improvement requires working with courses, curricula, teaching teams and departments. If these areas are neglected, changes brought about by individual academics are likely to:

fall foul of the apathy or jealousy of departmental colleagues. Focusing on this [the individual] level alone is likely to create frustration, conflict, and ultimately regression to the status quo. (p. 9)

Bottom-up strategies focused on supporting individual teachers, he argues, are not enough to improve the quality of university teaching, despite the taken-for-granted assumption that UTD programs should focus on the effectiveness of individual teaching:

It is tempting to see improving the quality of teaching as something that requires a single focus – on the individual lecturer. This emphasis is clear in most manuals on effective university teaching. It is still common in the workshops and seminars run by the educational development units that exist in most universities. It is implied in national movements to train and accredit academics as university teachers … Improvement requires intervention at several different levels of the enterprise of higher education. (p. 9)

The overall goal of UTD programs is to help universities and faculties enhance educational quality. As such, these programs have a dual role: to improve individuals' teaching and learning practices and to improve the institutional educational processes (Parsons et al., 2012; Roxå & Mårtensson, 2013). Fink (2013), for instance, defines faculty development as having both an immediate goal of enhancing the individual's teaching and curricula development abilities and an ultimate goal of supporting individuals in fulfilling the educational mission of their

institution to effectively meet the needs of students and society. Similarly, Stefani (2003) defines faculty development as "systematic and scholarly support for improving both educational processes and the practices and capabilities of educators" (p. 9), thus highlighting the importance of educational processes as distinct from the work of individual teachers.

2.2 External Drivers for Review of UTD Programs

In the current fiscally constrained higher education environment in Australia, there have been a number of government initiatives to define, measure and compare university performance, such as the introduction of the MyUniversities website in 2012 and its re-launch in 2015 as the Quality Indicators for Learning and Teaching (QILT) (http://www.qilt.edu.au). These have subjected teaching and academic development units to unprecedented levels of scrutiny (Stefani, 2013). Similar developments are occurring in the United Kingdom, where the Teaching Excellence Framework will soon be launched to report university performance metrics and provide the basis for determining differential funding on the basis of such measures (Department for Business, Innovation and Skills, 2015).

Interest in the evaluation of UTD programs spiked in Australia in 2009-10, with the publication of several reports from federally funded projects (Bowie, Chappell, Cottman, Hinton, & Partridge, 2009; Hicks, Smigiel, Wilson, & Luzeckyj, 2010; Southwell & Morgan, 2009). At that time, the political rhetoric shifted from teacher development to measures of effective performance. As a result, there was a change in how impact was defined by the funding body and the evaluators. In their Strategic Priority Project Guidelines (Australian Learning and Teaching Council, 2010), the project funding body called on evaluators to address a gap in the evidence relating to UTD program impact on "the quality of the student experience" (p. 9).

The type of evidence that appeared to have the greatest currency with the Council was that relating to indicators and metrics of quality, such as the Australian Teaching Quality Indicators Project (Chalmers, 2010) and the Academic Professional Development Effectiveness Framework (Chalmers & Gardiner, 2015). These two reports focused on developing tools and metrics to measure teacher performance and program effectiveness, respectively. The metrics of program effectiveness in the Effectiveness Framework included indicator outputs and outcomes such as numbers

of UTD participants completing the program and numbers receiving teaching grants or awards or reporting satisfaction with the program. Such indicators are concerned with program performance and risk conflating program evaluation with performance assessment. Evaluation has an analytic and diagnostic character that involves "a reflective attitude towards ways of improving teaching practices" (Ramsden & Dodds, 1989, p. 2). By contrast, performance assessment is concerned with maintaining extrinsic standards and emphasises competition, rewards and punishments (Ramsden & Dodds, 1989). It prioritises data collection for external appraisal rather than meaningful understanding of the outcomes and impacts of these programs.

The development of objective quality indicators is the stated aim of such activities. These indicators, however, are written into being by institutions in order for them to appear accountable to external, politically driven inspection (Ball, 2012). The focus on accountability embodied in these frameworks leads to an emphasis on who can claim credit for an outcome. They have little to say about how and why impacts occur and are therefore of limited use in discussions about evaluation of impacts embedded in context (Earl, Carden & Smytlyo, 2001). They shed little light on the reasons for a program's success, or lack thereof, and on potential strategies for program improvement (Trigwell, 2013).

At the same time, UTD program evaluators continued to take a developmental approach to programs and adopted a critical academic stance towards the idea of program impact and the use of performance metrics that conflated impact with effectiveness. As Biesta (2007) and others (Bototch, Miron, & Biesta, 2007) have cautioned in the face of constant calls for teaching effectiveness measures in schools, talk about effective teaching or effective education is meaningless unless you have first answered the questions—effective for whom and effective for what? As Slee and Weiner (1998) have observed, "school effectiveness research bleaches context from its analytic frame" (p. 5). In a higher education environment in which all universities are being measured, it is the job of academic development units to create metrics that will make this process meaningful for the university's purpose of qualitative improvement and not just meaningful for external government monitoring for differential funding (Stefani, 2013).

In the face of calls for standardised metrics of effectiveness, UTD program evaluators continue to emphasise the multi-contextual, multi-targeted outcomes of their programs. In an effort to retain the contextual characteristics of UTD program evaluation, the cross-university evaluation report by Bowie et al. (2009) emphasised that these programs necessarily incorporate several teaching and learning contexts for evaluation: the primary context, in which the program leaders and participants engage; the secondary context, in which participants and their students engage; and the tertiary context in which participants engage with their profession or discipline. Similarly, Roxå and Mårtensson (2013) postulate three levels at which such processes might work: micro (individual), meso (workgroup) and macro (whole of institution and beyond).

Brown, Donnan and Maddox (2009) identified several recurring themes in the overall purpose of UTD programs. These themes were developed from case analyses of UTD programs in five Australian universities and subsequent input from a roundtable of stakeholders drawn from the Australian academic development community. The five themes were:

Theme 1: Embedding a student-centred approach to teaching This can be achieved through modelling, introduction of best practice methodologies, and

enabling connections to be made with the academic's own context.

Theme 2: Encouraging a scholarly approach to teaching.

This is achieved through introducing academics to the body of literature on teaching in higher education and the practices of scholarly teaching, including the importance of reflective practice.

Theme 3: Networking and relationship building.

This is achieved through developing a sense of collegiality across disciplines and the institution, and building relationships with colleagues in schools and central units.

Theme 4: Orienting staff to their institutional context.

This is achieved through introducing staff to philosophical approaches of the institution and introducing relevant policies and procedures (including promotion, awards and grants) (p. 13).

Sanderson (2003) argues that such "complex, cross-cutting, multi-intervention programmes" are challenging to evaluate in terms of "the causal mechanisms by

which an intervention achieves change and how the operation of such mechanisms is influenced by relevant contextual factors" (p. 342).

The other difference between funders' and evaluators' conceptualisation of impact is the necessarily long-term nature of impact evaluation. As Sanderson cautions:

Evaluation funded by government will inevitably be focused to a significant degree on a process of learning and improvement rooted in short-term practice rather than one oriented to longer-term development of research evidence. Evaluators must satisfy the needs and demands of multiple stakeholders, often within limited budgets, and this involves balancing and compromising amongst various priorities (p. 342).

This difference is well illustrated in the evaluation of programs designed to improve population health. In population health programs, impact and impact evaluation typically have more precise definition as a response to demands from funding agencies to show that a program is 'working'. For example, a monitoring and evaluation publication for the Joint United Nations Program on HIV/AIDS (UNAIDS, 2010) emphasises that only a few health programs warrant an impact evaluation because, for most, an evaluation of the outputs and outcomes is sufficient and appropriate, given the program's resources and scope. In its definitions, the publication distinguishes between immediate, intermediate and long-term effects, equating only the long-term, cumulative effects with impact, as follows:

Outputs are the immediate effects of program or intervention activities; the direct products or deliverables of program or intervention activities, such as the number of sessions delivered, the number of people attending, and the number of resources distributed. Outputs can be used as a simple indicator of the influence of the program.

Outcomes are the intermediate effects of an intervention's outputs, such as change in knowledge, attitudes, beliefs and behaviours.

Impacts are the long-term, cumulative effects of programs or interventions over time on what they ultimately aim to change, such as social norms or economic conditions, and a reduction in the extent of the issues and their consequences that created the need for the program.

In terms of this classification, a focus on teachers and teaching efficacy privileges evaluation measures that are defined as outcomes, that is, changes in participants' knowledge, attitudes, beliefs and behaviours. Evaluating UTD program impacts, on the other hand, is more appropriately linked to the building of networks and relationships across disciplines and within institutions (Brown et al., 2009); that is, to the tertiary contexts of participants' work (Bowie et al., 2009). It is here that long-term cumulative effects can be observed at the macro level of whole of university and beyond (Roxå & Mårtensson, 2015).

To date few UTD program evaluations have examined these long-term cumulative effects (Pleschová & Simon, 2013; Prebble et al., 2005; Steinert et al., 2009) by investigating how (or whether) individual changes played out within the participants' organisations after the program. We do not know, for example, if participants took part in discussions with colleagues only to realise that their student-centred views of education were alien to the culture of their departments. We do not know if participants' greater interest in course development opportunities was futile because the department was not willing to consider suggestions for change, if participants actually influenced others' opinions or practices or whether, in challenging existing practices, their actions drew mainly negative responses.

2.3 The Kirkpatrick Model

In keeping with the push to evaluate programs to meet criteria from governments or other funding bodies, training evaluation frameworks developed in the corporate world have become increasingly influential. Most notable is the so-called Kirkpatrick model. In the 1950s and 1960s, Donald Kirkpatrick (1959a, 1959b, 1960a, 1960b) published a proposal for program evaluation in a commercially oriented, sales-driven organisation that has since become a benchmark for evaluators and researchers. He sought to motivate training program directors to use more comprehensive methods to determine whether a program delivered the expected improvements to the organisation that had sparked the need for training.

The Kirkpatrick evaluation model identifies four levels at which evaluation should occur and provides a sequential path for program evaluators to follow. The four levels, shown in Table 2.1, are sequential but not hierarchical; that is, they should happen in a particular order but none is more important than the others (Kirkpatrick, 2008; Kirkpatrick & Kirkpatrick, 2006).

Table 2.1Kirkpatrick's Levels of Evaluation of Program Impact (Kirkpatrick, 2008;Kirkpatrick & Kirkpatrick, 2014)

Evaluation level	Brief description
Level 1 Reaction	Degree of participants' satisfaction with the program, what they thought about what they learned, and their suggestions for improvement.
Level 2 Learning	Degree of participants' changes in attitude, increased knowledge and improved skills.
Level 3 Behaviour	Degree of changes in participants' behaviour when they returned to the workplace and applied their new knowledge, skills and attitudes.
Level 4 Results	Degree to which the stated program outcomes occurred as a result of the program.

Today, the model continues to employ the same four levels and brief descriptions although the definition and focus of each level and their use in program evaluation have been refined in various revisions since 2010 (Kirkpatrick & Kirkpatrick, 2010, 2014). This is important because many authors who refer to 'the Kirkpatrick model' mean the original model, rather than its more recent versions, and therefore fail to acknowledge the nuanced shifts that have been made in the conceptualisation of the purpose of each level and the connections between levels.

One of the major differences between the pre- and post-2010 models is the nature of what is evaluated at level 3. The changes here were made to address a range of issues including a lack of published evaluations at levels 3 and 4, the evolution of new methods in training and development and, partly, to respond to criticisms and what the Kirkpatricks describe as incorrect interpretations of particular elements of the original model. There has been a key shift in emphasis at level 3 from individual behaviour to the on-the-job environment in which participants apply their learning. In the original model, this level largely explored the extent to which participants

applied what they had learned in the program to their work. This was done by measuring participants' on-the-job performance of required behaviours and determining whether their *immediate supervisors* encouraged or permitted such behaviours. By 2013, level 3 had come to focus more clearly on participants' continued work performance and on the presence of supportive factors in the environment beyond individual supervisors, such as "processes and systems that reinforce, monitor, encourage and reward performance of the critical behaviours on the job" (Kirkpatrick & Kirkpatrick, 2013, Chapter 12, Section 3, para. 1). These processes and systems could include, for example, support mechanisms (e.g. follow-up modules, reminder notifications, provision for self-directed learning) and extrinsic and intrinsic forms of recognition and reward for effort. They could also include accountability systems such as work reviews, action planning or reporting on key performance indicators that reinforce mandated on-the-job behaviours.

Other small changes were made at the other levels in the 2013 and 2014 models, An examination of participants' sense of engagement and program relevance and of satisfaction was introduced at level 1, and an examination of participants' confidence and commitment, in addition to their knowledge, skills and attitudes, was introduced at level 2. At level 4, evaluators are now encouraged to identify and report on the factors (key indicators) that can be measured or observed to change before the desired result of the program is achieved.

2.3.1 Adaptations and critiques of the Kirkpatrick model

Since it was first proposed in the late 1950s, the Kirkpatrick model has become widely recognised and has been adapted for use in programs and organisations in ways that are beyond its original scope of evaluating company employee training programs. It has become embedded in the disciplinary culture of evaluation studies and regularly appears in publications either through explicit reference or, more subtly, via a tendency to conceptualise the process of evaluation as a set of, at least nominally, sequential stages. Some authors, such as Knight and Trowler (2000), have questioned the applicability of the Kirkpatrick model to higher education. They argue that, since the model was originally developed to identify the effects of short training programs for employees in corporate, profit-driven businesses, it is not necessarily suitable for public or non-profit sector programs.

From a health education perspective, the Kirkpatrick model has also been criticised for focusing mainly on 'what and how' rather than 'why' questions. The model is criticised for providing insufficient detail to explain why findings occur and for remaining steadfastly agnostic on an underlying learning theory that takes account of what happens during or after the training programs. As Yardley and Dornan (2012) point out, the model does not capture the rich and diverse outcomes that are important in complex programs in medical education, where effects on the organisation and on patients may take years to appear. Nor does it explain the processes by which particular outcomes might be consequential to continuous learning and other longer-term effects.

Nevertheless the model continues to appear, explicitly or implicitly, in much of the literature on program evaluation in many education sectors. Table 2.2 compares the Kirkpatrick 4-stage model with three adaptations made by evaluation studies of programs in different education contexts—school teacher development programs, university teacher development programs and interprofessional health education programs. All three adaptations, however, use terminology and progression stages that are similar to those in the Kirkpatrick model, which shows the extent to which the idea of levels and stages has entered the popular lexicon of evaluation studies.

Table 2.2

Kirkpatrick model (Kirkpatrick & Kirkpatrick, 2014)	Adaptation 1: Primary and secondary school teacher development programs (Guskey, 2000, 2014)	Adaptation 2: University teacher development programs (Kreber & Brook, 2001)	Adaptation 3: Interprofessional health education programs (Barr, Koppel, Reeves, Hammick, & Freeth, 2005).
1. Reaction	1. Reaction	1. Participants' perceptions/satisfactio n with the program	1. Reactions
2. Learning	2. Learning	2. Participants' beliefs about teaching and learning	2a. Modification of learners' attitudes/ perceptions
			2b. Learners' acquisition of knowledge/skills
3. Behaviour	3. Organisational support and change	3. Participants' teaching performance	3. Learners' behavioural change
4. Results	 Participants' use of new knowledge and skills 	4. Students' perceptions of staff teaching performance	4. Change in organisational practice
	5. Student learning outcomes	5. Student learning6. The culture of the institution	5. Benefits to patients/ clients

Comparison of Kirkpatrick Model Adaptations from Education and Health Programs

Inspection of the three adaptations shows that the process of evaluating programs at the level of results varies in different education institutions and depends on the type of institution. Level 4 of the model is frequently adapted to better suit the educational focus of such institutions rather than the commercial focus of business organisations. Each of the three adaptations has expanded on the results focused level 4 of the Kirkpatrick model. The adapted models now make clear that teacher education programs are expected to show results as changes in the culture and practices of participants' organisations and as changes to the learning outcomes of the participants' students.

Evaluation studies of school teacher development programs more often use Guskey's (2000, 2014) adaptation of the Kirkpatrick model which positions changes to the organisation at level 3, before change in participants' behaviour (use of new knowledge and skills). This emphasises that, in schools, organisational practices and culture will affect what a participant can do and how they work. Hence it is vital to attend to organisational support factors before examining changes in participants'

actions and skills. This represents a more socially situated, collectivist interpretation, one that assumes that the goals of the group (in this case the organisation) precede those of the individual.

In the Kirkpatrick (Kirkpatrick & Kirkpatrick, 2014)model, organisational level impact and change is placed after the level of change in participants' behaviour. This reflects an assumption that individuals, through their actions, attitudes, knowledge and skills, are expected to have an impact on the organisation. This positioning of the organisation in the impact hierarchy reflects an individualistic, free-market interpretation, in which a single pioneer or change champion works to steer the organisation in new directions (though the mechanisms through which this occurs are undefined in this framework).

Kreber and Brook (2001), who adapted the Kirkpatrick model for use in university teacher development programs, expanded level 4 to include students' perceptions of teaching performance, student learning, and the culture of the institution. In health education, Barr et al. (2005) used the original Kirkpatrick model to contextualise the evaluation levels for interprofessional education and to expand the second and fourth levels of impact.

All these adaptations privilege certain stages in the framework in ways that are at odds with Kirkpatrick's original intent. Kirkpatrick (1998) claimed that each stage of evaluation is as important as the next and characterises the evaluation as a continuous, indivisible sequence of activity:

'Where do I start? What do I do first?' These are typical questions from trainers who are interested in evaluation and have done little of it. My suggestion is to start at level 1 and proceed through the other levels as time and opportunity allow. Some trainers are anxious to get to level 3 or 4 right away because they think the first two aren't as important. Don't do it. (Kirkpatrick, 1998, p. 109)

He emphasises that the evaluator should evaluate all the levels of impact and do so sequentially through the levels. Although he acknowledges that this kind of evaluation is difficult and time consuming, he argues repeatedly that a level must not be evaluated until the earlier levels have been evaluated.

This need for frequent reiteration of the importance of moving stepwise through the sequence suggests that Kirkpatrick's ideal sequence rarely appears in reality. Yet much energy has been expended on the idea of levels and many authors have sought to adapt or re-imagine them without any guarantee that they adequately depict the ethos or language of the program or are relevant to the experiences of those who completed it.

Leaving this concern aside for the moment, it is important to note that reviews of how programs are evaluated consistently show that most studies report impact at level 1, fewer at level 2, fewer still at level 3 and very, very few at level 4 (Thistlethwaite, Kumar, Moran, Saunders, & Carr, 2015; Yardley & Dornan, 2012). In other words, Kirkpatrick's sequential ideal is almost never realised since the whole sequence is rarely followed from beginning to end. Program evaluators have tended to use the levels as independent categories to be accessed individually or collectively as the evaluators see fit. The sequence has in reality become disarticulated.

2.4 The Canberra Model

The University of Canberra Graduate Certificate in Higher Education Evaluation Framework (hereafter referred to as the Canberra model) was developed by the program leaders as an evaluative framework for the longer-term (beyond graduation) effects of the University of Canberra's UTD program (McCormack, Kennedy, & Donnan, 2009). It remains unpublished, shared only in internal communications and at a 2009 meeting of Australian UTD program leaders, the Foundations of University Teaching Colloquium. Although its dissemination has been limited, the model provides a more complex picture of UTD program outcomes that overcomes some of the criticisms of both the Prosser and Trigwell (2006) and Kirkpatrick (2014) models.

The Canberra model (reproduced in Figure 2.2) provides a two-dimensional matrix of outcomes and impact of UTD programs. Six program outcomes, identified in the first column of the table, are plotted against their potential impact on the seven different stakeholders identified in the top rows.

Impact dimensions (engagement with statebolders) Impact dimensions (engagement with statebolders) Teaching Participant Participant Institution Iteam Participant Discipline ADE & Dean DVC(e) Iteam Participant Participant Discipline ADE & Dean DVC(e) Iteam Participant Participant Participant Discipline ADE & Dean DVC(e) Iteam Participant Participant Participant Discipline ADE & Dean DVC(e) Iteam Participant Participant Participant Participant DVC(e) Iteam Participant Participant Participant DVC(e) DVC(e) Iteam Participant Participant Participant				Timing: Be	Timing: Beyond graduation			
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Strategic citizenship includes: leadership in L&T, policy development and/or implementation, strategic advice, strategic planning, strategic initiatives, committee participation, L&T quality enhancement, governance, teaching excellence awards, gaining internal or external funding for L&T initiatives. Scholarship offfor L&T includes: research into L&T, L&T grants (eg investigate one's own students' learning), read and review literature on L&T, relate L&T knowledge to discipline, communicate results of own and others' research into L&T, use of own or others research findings to inform teaching/curriculum/course content, link own research to research to research of broader communities of practice.	Notes: Notes: Academic citizenship includes contribution to L&T initiatives lec ennacing and identifying with ex	 fostering & facili d by others, internation oc 	L tating communitie al & external colls mmunities (ea HE	ss of practice, mentori aborations, provision ERDSA, etc).	ing, networking, disseminatio	n of L&T innovations, P sgues. development of L	D in L&T for colleagu	leagues,
Scholarship of/for L&T includes: research into L&T, L&T grants (eg investigate one's own students' learning), read and review literature on L&T, relate L&T knowledge to discipline, communicate results of own and others' research into L&T, use of own or others research findings to inform teaching/curriculum/course content, link own research to research to research of broader communities of practice.	Strategic citizenship includes: participation, L&T quality enhand	leadership in L&I cement, governar	T, policy developm rce, teaching exce	nent and/or implemer. ellence awards, gainii	ntation, strategic advice, strat ing internal or external fundin,	egic planning, strategic g for L&T initiatives.	initiatives, committee	
	Scholarship of/for L&T include discipline, communicate results research to research of broader	es: research into l of own and other r communities of p	_&T, L&T grants (s' research into L8 vractice.	eg investigate one's c &T, use of own or oth	own students' learning), read iers research findings to infor	and review literature or m teaching/curriculum/c	n L&T, relate L&T kno course content, link ov	wledge to wn

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Table 3: UC GCHE Evaluation framework: Impact and outcomes dimensions

Figure 2.2. Canberra Model of UTD Program Outcomes and Impact. From "UC GCHE evaluation framework: Impact and outcomes dimensions" by McCormack et al., 2009.

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C McCormack, Kennedy & Donnan, 2009

This model is the first to focus explicitly on impact evaluation. Unlike other models, it distinguishes program outcomes from impact and schedules the evaluation to take place beyond graduation, that is, after the participants have completed the program.

It clearly identifies that interest in the outcomes of the program extends beyond participants' graduation and that those with an interest in these outcomes include people other than the teaching team, the participants and the students of the participants. The outcomes (and therefore the effects) should be of concern to the participants' colleagues (for instance, in the participants' department and disciplines), heads of discipline, senior leaders in the faculties (such as Associate Deans of Education and faculty deans), senior university leaders (such as Deputy Vice Chancellors of Education) and external stakeholders.

In contrast to the Prosser and Trigwell (2006) and Kirkpatrick (Kirkpatrick & Kirkpatrick, 2014) models, the Canberra model anticipates outcomes at the organisational level. This framework defines the outcomes that could be realised as effects on the teaching environment (i.e. context) and does so in a more overt way than the various adaptations of Kirkpatrick's model. As Bowie (2009) has observed, in university teacher development programs there are actually three teaching and learning contexts for evaluation: the primary context, where the program leaders and the program participants engage; the secondary context, where participants and their students engage; and the tertiary context where participant and profession/discipline engage.

In the Canberra model, the outcomes do include effects on participants' beliefs, knowledge and practice and their students' learning and perceptions of teaching, which is similar to the Kirkpatrick model (Kirkpatrick & Kirkpatrick, 2014). An equal number of outcomes, however, relate to scholarship and community aspects of a teacher's role. The organisation level outcomes identified in this model are more specific and detailed than those in Prosser and Trigwell's (2006) conception of context and are more relevant to the social and human service focus of universities than the conception of results in terms of commercial market values as in the Kirkpatrick model (Kirkpatrick & Kirkpatrick, 2014). The last three outcome dimensions (community connectivity, academic and strategic citizenship and scholarship of teaching and learning) highlight the broader contextual and social

relational aspects of the intended effects of UTD programs. They suggest that community connectivity and scholarship are important elements of relevance to the course and departmental contexts and, ultimately, to the outcomes of students' and teachers' teaching and learning. Thus the Canberra model emphasises the importance of learning beyond the program, something that is only touched upon in the Kirkpatrick model (Kirkpatrick & Kirkpatrick 2014).

2.4.1 Adaptations and critiques of the Canberra model

The Canberra model provides another response to Knight and Trowler's (2000) criticism of the Kirkpatrick model. Knight and Trowler (2000) noted that corporate training supposes a straightforward link between the participant and the organisation—a single participant, with a single supervisor working in a single company. It implies a contractual relationship between supervisor and staff, where expectations are clear and rewards are offered in exchange for efforts and loyalty. The Canberra Model acknowledges that in practice, teachers do not tend to operate on the basis of personal profitability alone and manage multi-profession relationships—at least one to their disciplinary profession (such as health) and one to the profession of teaching or academia.

Since the Canberra model remains largely unpublished, there have been no published revisions or direct evaluations of the model itself. Although the model was developed by the University of Canberra Learning and Teaching Centre, it was not used by the Centre for its UTD program, due partly to a restructuring, which saw a shift in the centre's focus, and partly to the retirement of the model's primary author following the restructure (C. McCormack, personal communication, 2013).

The Canberra model appears to be an exemplar of the portfolio approach to UTD program evaluation. The program portfolio approach involves keeping a longitudinal archive of rich and varied materials that document what Sword (2008) describes as the "frustrating yet fertile messiness" (p. 94) of the true work of teaching and research in higher education. Sword (2008) asserts that the evaluation questions currently being asked of UTD programs by the higher education sector are somewhat shallowly focused. They ask for an analysis of a rational sequence of measurable inputs and outputs to present a "results-oriented, does-this-teaching-method-work-or-

doesn't-it approach" (p. 93). Sword advocates for an evaluation that provides the opportunity to "capture dissenting voices and apparently contradictory data" (p. 94) that could be used to explore the evaluation questions that may be asked of UTD programs in the future.

Requiring UTD program instructors or academic development units to keep a comprehensive portfolio of program evaluation data is a laudable aim but one that is rarely achievable in practice, given the limited resources and time available to most researchers. It must be remembered that program evaluation does not only involve collection of data for a program portfolio. It also means that researchers and program leaders have to collate, analyse, interpret and report the results, which requires additional commitment of resources and time. Investment in this type of long-term, complex evaluation is made even more difficult in a context of finite resources where there is often a trade-off in the allocation of money, people and time between detailed evaluation or the program itself (Sanderson, 2003).

A recent study using multiple impact indicators has been conducted at the University of Sydney. Trigwell, Caballero Rodriguez and Han (2012) reported on a synthesis of their four studies to evaluate a year-long UTD using data from participants who completed the program between 1996 and 2008. On a number of measures, including success in teaching grant applications, teaching awards, and satisfaction rating from their students, they found that participants showed a small positive increase compared to the rest of the university. The authors themselves acknowledged that combining the four studies created a "consistently positive picture" (p. 511) of the program which supported its continuation. This exercise demonstrated the strength of a portfolio approach that draws on multiple indicators, but the authors also conceded that each of the studies, taken individually, showed positive effects that were so small as to possibly be regarded as inconsequential.

The Trigwell et al. evaluation involved multiple analyses and researchers. This suggests that continuity of resourcing for the portfolio approach to evaluation may be problematic. In 2013 Trigwell published a further evaluation of the UTD program, in which he focused more closely on a single indicator—receipt of teaching awards. He used participant interviews to gain more contextually rich insight into whether, how and for whom the program goal of reflection and scholarship was seen as relevant

and useful, whether this aided participants' success in teaching award applications and how the relevance could be improved by program leaders. The differences between the 2012 and 2013 evaluation approaches illustrate the contrasting purposes of UTD evaluations. One focused on quantifiable outcomes and the other on explanatory feedback for program improvement. The former tends to foreground accountability, while the latter foregrounds an improvement agenda.

2.5 UTD Program Impact Beyond Graduation

The common contexts, purposes and evaluation models of UTD programs all point to an expectation that the influence of the program will endure beyond graduation and will extend beyond the individual participant to affect the academic practices of participants' colleagues, departments and institution. To date, evidence of this kind of impact has been limited. The main focus has been on the endurance of program outcomes associated with individual participants' conceptions and approaches, rather than on outcomes associated with practices in the context of the academic community and institution.

Stewart (2014) attempted to remedy the lack of long-term studies to assess postgraduation impact by interviewing a number of participants more than five years after they had completed the program. In this study, however, impact was interpreted as the prominence that participants afforded the program in stories of their "professional learning journeys" (p. 90) following graduation. In other words, impact was construed as a personal experience that played out in the sense-making narratives of individuals. Although the narratives included stories of changes in practice for both individuals and their organisations, the study's focus was more on a participant's changed sense of self than on the effectiveness of the program in improving teaching and learning within their organisations.

There are also few studies of the long-term impact of professional development programs in medical education (Steinert et al. 2006), despite a rapid increase in the availability of such programs over the past two decades (Tekian & Harris, 2012). Sethi, Schofield, Ajjawi and McAleer (2015) used an online survey to collect the attitudes and opinions of participants one to four years after they graduated from an

articulated Masters of Medical Education program at a Scottish university. They found definite increases in participants' sense of self-efficacy, confidence and willingness to participate in educational scholarship, but they did not directly link any of this to changes in educational practice or improved student learning outcomes.

Changes at the institutional level may not be identifiable until some time after the end of the program (Knight, 2006; Parsons et al., 2012). To achieve validity, such studies are likely to require more time-intensive qualitative methods, collection of data from multiple sources and the involvement of a range of stakeholders. It is inherently difficult to directly ascribe changes at the organisational level to participation in the course: how would it be possible to say that the changes were due to the individual's participation in the course, rather than to any number of other factors? One approach to operationalising institutional impact is illustrated in the attempt by Trigwell et al. (2012) to measure whether program participation would improve students' satisfaction in their degree. The indicators used were very broad: the percentage of program graduates per faculty and a single question on the university-administered annual student course experience questionnaire. While participation seemed to correlate with increased student satisfaction, the effect was very small and difficult to ascribe to the UTD. As Kirkpatrick (1977) argues, evidence can be straightforward to collect in an evaluation of training programs but proof is much more difficult, time-consuming and may be impossible to produce in an evaluation.

2.6 Influence on Organisational Networks and Practices

UTD programs anticipate that participants will continue learning and developing their academic practice beyond the end of the program. Two foundational concepts in Australian UTD programs are that participants learn through reflection on practice and through the scholarship of teaching and learning (Kandlbinder & Peseta, 2009). The development of individual teaching and educational practice is seen to occur through participants' reflection on experience, education theory and research generally, as well as educational theory and research in their discipline. Reflection, Kreber (2013) contends,

inspires a person's separation from 'the they' ('das man') so as to achieve his or her full potential of being; it brings about a person's realisation of how assumptions he or she has taken for granted are shaped by social historical context. (p. 100)

Reflection does not focus only on the individual teachers' awareness of what they know and how they go about their own teaching. They are also encouraged to reflect on why they go about their practice in the way they do (Kreber & Castleden, 2009). Reflection on existing premises is encouraged as a way of becoming aware of the departmental and institutional social order, control and authority and challenging the departmental norms and values that underpin existing teaching and assessment methods and play out in course and curriculum review committees. This idea of critical reflection as a means of separation from the existing, historically situated practices mirrors Trowler and Bamber's (2005) idea that it is workgroups, and not only individuals, that have the potential to "reflect on their recurrent practices, implicit theories, tacit assumptions, conventions of appropriateness and engage in a struggle to change them, if necessary" (p. 88). While Kreber (Kreber & Castleden, 2009; Kreber & Cranton, 2000) focuses on an individual's critically reflective stance, including the potential for UTD participants to achieve separation from the unexamined premises of their teaching colleagues, Ramsden (2006) also reminds us that the ideal situation is one in which the entire organisation builds and sustains a culture of scholarly enhancement of teaching and learning. That is, UTD participants ought to be working within an organisational climate that encourages innovation and a reflective approach to teaching, rather than working as reflective practitioners in spite of the organisational climate.

Few studies of UTD programs have looked deeply at the interaction between program participants and the organisational culture, climate or teaching environment. Most authors identify collegial or departmental attitudes that would provide a fertile environment in which participants could apply their learning from the UTD program. They do not explore how participants or the program would themselves create or promote such an environment. For example, in looking at the question of how to evaluate a UTD program to assess its impact on the culture of the institution, Kreber and Brook (2001) suggest that the following issues need to be investigated:

- Course participants' perceptions of how (and if) their participation was valued by their own department;
- Whether department heads encouraged their staff to participate, identifying whether all staff were aware of the course and whether they would want to participate;
- 3. Students' perceptions of whether the department valued their learning and created an environment conducive to learning; and
- 4. How/whether teaching was valued in that department and how often the course was referred to in public departmental communication.

Similarly, Stes, Clement & Van Petegem, (2007) identified factors that constrained or promoted UTD program impact as an undifferentiated sequence of issues affecting the participant in unknown ways and over which the participant seems to have an unexplored degree of control. Their study of a UTD program at the University of Antwerp, Belgium, was based on surveys of 30 participants one and two years beyond graduation. Table 2.3 summarises the factors reported to affect impact.

Table 2.3

Factors Affecting UTD Program Impact Identified by Stes et al. (2007)

Factors constraining impact	Factors promoting impact
Lack of consensus and collaboration with	Enthusiastic reactions from colleagues and
colleagues	students
Student numbers or characteristics	Collaboration with colleagues who also
Time pressure and job responsibilities	completed the program
Imbalance from pressure to research and	Organisational teaching policy
publish	Characteristics of the training program
Lack of support from supervisors and policy	
makers.	

Gibbs (2010), talking generally about departmental culture, noted that there are cultural variables in a department that are important to the quality of learning. These include whether (a) teachers regularly speak with each other about teaching and about improving teaching; (b) scholarly evaluation of educational effectiveness occurs; (c) teaching is valued and rewarded; (d) there is systematic support, including funding, for innovation in teaching.

Trowler (2008), however, challenges the idea that UTD programs should have an impact on the culture of an organisation, cautioning that culture is "an extremely slippery word" (p. 1). It is understood intuitively, but lacks precision and often acts as a kind of shorthand, remaining unexamined by further analysis. The idea of changing the organisational culture is further challenged by those who argue that a university—or even a department—does not have a single culture. Rather, departmental workgroups develop their own cultures, so a department may contain several subgroups each with its own culture. The culture of an academic workgroup, according to Trowler and Cooper (2002), includes the group teaching and learning regime, defined as "a constellation of rules, assumptions, practices and relationships related to teaching and learning" (p.244).

In support of this rejection of a single institutional or departmental culture, Biggs (1993) characterises the institutional environment as a set of nested microsystems (Figure 2.3) comprising: students; the classroom system (teachers, students and teaching contexts); the institutional system (subsystems at faculty and department levels) and the community system. Thus there will be more than one culture in the institution. Whether teachers perceive they have the freedom to introduce changes in their teaching is related to their perceptions of the course and departmental contexts. Biggs (1996) characterised the relationship between the individual teacher performing actions and the contextual constraints upon such actions as a system, as displayed in Figure 2.3. The microsystems in the three inner rings (student, teacher and teaching context) form what Biggs (1993) calls the classroom system. The classroom system is bounded by the three outer rings of departmental, institutional and community structure, bureaucracy and pressure systems.

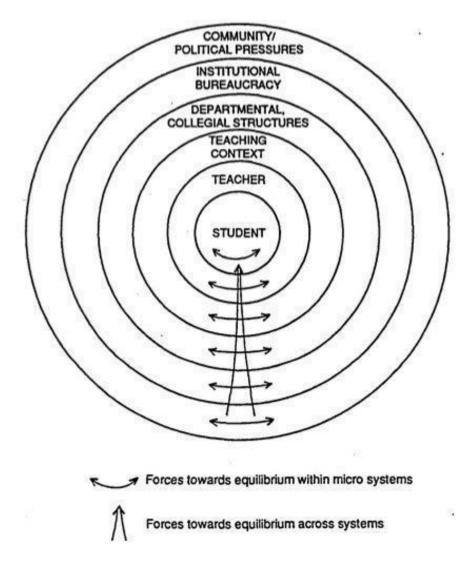


Figure 2.3. Macro and constituent micro systems in tertiary education (Biggs, 1993). Copyright © 1993 Routledge. Reprinted with permission.

The classroom is, however, part of the larger system of the institution. While there are certain common competencies, national curriculum guidelines and accreditation standards to which courses should adhere, the extent to which the institution tolerates deviance at the classroom level varies from one institution to another (Biggs, 1996).

Biggs (1996) cites the example of assessment practice, in which the degree of control teachers have over what they assess and how they assess students is affected by what departmental and institutional colleagues, administrators and senior managers will permit. A teacher may have particular aims and ways of achieving those aims when it comes to assessing students, but these are affected by what is allowable in the collegial structure of the department and institution.

A faculty committee, for example, may have some input into the content of a course but will rarely decree how an individual gives a specific lecture. If, however an individual wishes to change how s/he assesses students in a subject, it is common for this change to require permission from the faculty's teaching and learning committee (or an assessment committee). Where the individual is involved in the design of a course (such as a Bachelor's degree), approval for the curriculum usually involves several committees in and beyond the faculty, including the university academic board. As the connections are different, individuals may have differing opportunities to influence how assessment is done in the faculty beyond simply making changes within their own classes and subjects.

Both Biggs (1993) and Ramsden (2006) have argued that improving the quality of university education requires support from the institution in addition to individual initiatives. According to Ramsden (2006), actual classroom practice is heavily influenced by distal factors such as academic managers' approach to leadership, experiences of collaborative management of teaching, and experiences of inspirational and supportive leadership for teaching. An individual academic has the greatest control at the level of the classroom, but the department and faculty layers also have the potential to enhance or impede "enlightened practice" (Biggs, 1993, p. 77) in university teaching and student learning. Both the formal requirements of institutional policy and administration and the informal requirements that are determined through interactions with colleagues exert an influence on how assessment is likely to be practised in the department. In this perspective, therefore, context is a social force of collegial and bureaucratic interactions created by people exerting influence on what a teacher is likely to do.

One way in which UTD programs are generally acknowledged to have an influence on participants' colleagues and departments is through conversations and activities with colleagues who had not participated in the program. UTD programs, according to Hanbury, Prosser, and Rickinson (2008), seem to improve participants' confidence in several ways. For instance, as participants become more familiar with the "language of teaching and learning" (p. 475) and realise that their understanding of this language surpasses that of more experienced colleagues, they come to feel "better equipped to take part in educational discussions within their departments and respond enthusiastically to opportunities for new course development" (p. 475).

A review of UTD programs in medical education reported possible effects on departmental culture through peer teaching, such as the dissemination of skills at participants' home institutions through further training delivered by participants from the original program, as well as the formation of supportive networks and interactions with other teachers and colleagues (Steinert et al., 2006). It is unclear, however, what effects, if any, these new networks and activities had on participants' workgroups or departments, or how long they lasted.

In UTD programs in higher education more generally, participants' interactions with colleagues and the possible effects of these interactions on departmental culture have been reported in only limited ways. Participants felt more confident to talk with colleagues about teaching (Stes et al., 2007) and had ongoing contact with course coordinators (Martin & Ramsden, 1994). Participants also reported that they discussed ideas from the program with colleagues teaching in other courses in their department and being approached by more senior colleagues for help with teaching and learning in a departmental restructure. Participants and department heads also described changes in participants' focus, from thinking about their own subjects to thinking more holistically across degree programs (Prosser et al., 2006). Overall, the research suggests that the core entity or primary element of analysis is the individual rather than the organisation. UTD participants have been shown to feel more confident and capable of participating in discussions on learning and teaching with colleagues and in departmental meetings, and sharing their ideas in those interactions, but longer-term research on how those interactions unfold remains scant.

Hager and Hodkinson (2011) contend that the metaphor of individuals transferring learning from program to organisation masks an uncritical view of context. They focus more on context as the learning cultures in which individuals participate, the cultures they and others call into being, shape and maintain through their participation, and in which they develop as individuals:

Learning cultures are not like boxes, which contain learning. Rather, they operate like a field of forces, many of which originate outside of the specific physical context in which a person learns. (p. 43)

Another view of the organisational climate for teaching is that it is created within workgroups (Ashwin, 2009), that is, participants themselves are involved in the creation of the environment within which they must operate. This introduces the idea that, in order to examine the processes through which UTD program impact occurs, we need to take account of how climate is brought into being through complex social interactions beyond graduation. Reported changes in interactions and participants' focus could be seen as individual changes in behaviour. However, when the participant is seen as an actor within their departmental network (Roxå, Mårtensson, & Alveteg, 2011), these effects are also suggestive of changes in what is valued within the department as participants create new networks for dialogue.

Roxå and Mårtensson (2015) theorise that the attitude to teaching and learning in the participants' immediate workgroups (meso level) will strongly influence their ability and willingness to pursue educational development and curriculum reform. They propose a heuristic to characterise the different workgroup environments participants may encounter and the potential effect on participants of these differing styles of workgroup. Ginns, Kitay and Prosser (2010) attempted to elicit some understanding of the influence of different workgroup cultures by interviewing a number of staff regarding their experiences of teaching after graduating from a teaching development program. They compared the experiences of two academics—one in a supportive workgroup culture and the other embedded in a workgroup culture that was discouraging and unsupportive. Few similar studies are available and the influence of existing organisational culture on program participants remains largely unknown. Consequently, the influence of UTD programs and their participants on that culture remains subject to speculation.

Steinert (2010) suggested that UTD participants could become the nucleus for the formation of new communities of expert educators to sustain good educational practice. In recent UTD evaluations, several authors have begun to employ social network analysis methods to examine the effect of UTD programs on participants' interactions with colleagues during and after the program (Rienties & Hosein, 2015;

Rienties & Kinchin, 2014; Van Waes, Van den Bossche, Moolenaar, Stes, & Van Petegem, 2015). Survey results indicated that program participants tended to increase the number of colleagues they spoke to about teaching and learning during the program and they maintained these connections post-program. Participants made new connections with other participants both inside and outside the program (Rienties & Hosein, 2015; Rienties & Kinchin, 2014). Participants also grew these network connections during their time in the program and maintained them after the program (Van Waes et al., 2015).

Van Waes et al. (2015) noted that factors such as departmental culture, trust and hierarchy supported or constrained participants' networks. From analysis of in-depth interviews, they reported that the values participants derived from their networks included: emotive aspects, such as the opportunity to vent or to feel affirmed about their teaching work, as well as what the authors referred to as instrumental values, such as learning to talk about teaching; discovering shared teaching interests; broadening one's own ideas about teaching; and sharing, receiving, applying and being asked for ideas and feedback on teaching. Social network analysis, while valuable, fails to clarify the extent to which these new networks impacted on the participants' local workgroup environments.

The idea of context as something that is maintained through social forces and interactions is evident in medical education as it is in higher education generally. Swanwick (2005), for example, looked at the learning climate, that is the contextual factors that create a positive environment for learning, in the medical workplace. He proposed that environments that offer the opportunity for conversations with a variety of colleagues and work teams are also environments in which questioning and conversations create opportunities to "transform social practice" (p. 864). This socio-cultural approach suggests that these interactions will change both the individuals involved and the organisational contexts in which they operate.

Similarly, Niewolny and Wilson (2009) argued that learning theories in higher education need to include a critical cultural perspective so as to avoid representing context as a simple container of activity. Perspectives on UTD programs and their impact on participants as both adult learners and teachers of adults need to more fully account for the ways in which issues of learning, context, and power contribute to social processes of identity formation, knowledge construction, and resistance in adult education. (Niewolny and Wilson, 2009, p. 29)

Lave (1996) also calls for a focus on the specifics of "changing participation in changing practices, especially learners' changing conditions and ways of participating" (p. 162). This concept of learning as participation emphasises a social view of learning in which context is dynamically created between people and where contexts in turn contribute to the development of people. In what Lave describes as a social practice theory of learning, each individual's participation contributes to "the making of differences of power, salience, the value of themselves and other participants" (p. 162). These elements are represented in Figure 2.4.

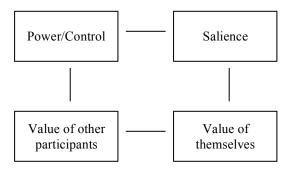


Figure 2.4. Diagrammatic representation of Lave's (1996) social practice theory of learning.

Lave's emphasis on practice aligns with a broader movement to put practice at the centre of investigating and analysing social interactions and organisational change. Described variously as a practice turn (Schatzki, Knorr Certina, & von Savigny, 2001), practice theory (Rouse, 2007) and practice idiom (Nicolini, 2013), this movement represents a loose affiliation of approaches that share a number of common concerns but which differ in the way they understand practices to work and how practices are made and unmade, maintained and followed (Hargreaves, 2011; Nicolini 2013; Price, Scheeres and Boud, 2009).

When examining the impact of educational programs designed to change the ways in which both individuals and organisations think and act, Nicolini identifies a middle or meso level of practices that operate in the layers between the micro level of the individual and the macro level of social forces. These meso level practices operate within workgroups and organisations and focus on collectively mediated intelligibility (see also Rouse 2006). Intelligibility suggests that, enmeshed within practices, people and organisations do and say what it makes sense for them to do and say (Schatzki, 2002). Understanding what it makes sense for people to do within their organisational practices and how educational programs such as UTDs can change what it makes sense to do is vital to understanding the impact of such programs. More importantly, understanding how the tensions between existing understandings and practices and new understandings and new practices are resolved is crucial to investigating how these programs might achieve their intended outcomes.

Rather than concentrating on individual conceptions, attitudes, behaviours and choices, a practice-focused view of learning highlights participation in socially constituted practices. Meaning is seen to reside in collective practice rather than in individuals' heads. Practices, according to Schatzki et al. (2001), are generally conceptualised as a nexus of activities, utterances and material artefacts that constitute "embodied, materially mediated arrays of human activity centrally organized around shared practical understandings" (p. 11). Importantly, Schatzki (2002) argues that this nexus is held together by specific elements of shared understanding, rules and goal-oriented (teleo-affective) ends. He defines practice as a "temporally evolving, open-ended set of doings and sayings linked by practical understandings, rules, teleo-affective structure and general understandings" (p. 87). Participants in practices share a practical know-how, observe or disregard rules such as explicit directives, admonishments or instructions. Participants in practices share a general understanding of an abstract sense of worth expressed in the activities and the teleo-affective structures embodied in the ends, purposes, beliefs and emotions they espouse and adopt.

Individuals are carriers of practices and resist or adopt them (Warde, 2005). If UTD program participants adopt the beliefs and attitudes encouraged within the programs, they may be seen as carriers of particular student-focused, critically reflective and scholarly academic practices. For these to become practices located in their workgroup culture, in the true sense of practices as collective doings and sayings,

there will need to be negotiation, lobbying, bargaining and possibly contestation. According to Reckwitz (2002), breaks and shifts in the production of practices take place in the

everyday crises of routines, in constellations of interpretative indeterminacy and of the inadequacy of knowledge with which the agent, carrying out the practice, is confronted. (p. 255)

In the context of teaching and educational development practices, such crises of routines might involve the introduction of a new assessment policy, a new staff member, a new technology or student attrition.

A practice-based approach can "reconceptualise behaviour change initiatives as attempts to intervene in the organization of social practices" (Hargreaves, 2011, p. 95). There are shortcomings in analyses that focus only on single practices and neglect the connections, alliances and conflicts between practices (Warde, 2005). Social and power relations are involved in practices that produce and sustain the practices. Practices are always being negotiated and transformed within collective groupings.

2.7 Summary

This study aims to better understand the impact of UTD programs on teachers and the changes they make to improve the quality of education in their workplaces after they have completed a UTD program. Existing reports on the impact of formal UTD programs have tended to focus on changes in the individual teacher at the end of the program, creating a set of understandings which are important in terms of the immediate effect of the programs but leave other contexts unexplored.

Studies informed by the Prosser and Trigwell model provided some evidence of a positive impact of UTD programs on the learning outcomes of participants' students. This same model predicted that the teachers' approach to teaching was related to their perceptions of the teaching environments in which they worked. The impact of UTD programs on the organisation was defined as the impact on the teaching

environment. These studies, however, did not examine how the UTD program was expected to have an impact on those environments.

Studies informed by the Kirkpatrick model reported the effects of training as a hierarchy of evidence. These studies tended to focus on changes in teachers' knowledge and behaviour. The impact of the program on the organisations in which the participants worked tended to be characterised in terms of teachers transferring their new knowledge and behaviour from the program to the organisation. These studies conceptualised individual teachers as conduits of change and change agents. Although the Kirkpatrick model has been widely used in program evaluations, it does not explore the processes by which individuals are expected to have an effect on the wider organisation.

Both the Prosser (2006) and Kirkpatrick (Kirkpatrick & Kirkpatrick 2014) models predicted that UTD programs would have an impact on the organisation. They predicted a positive influence on the organisational environment in which participants worked and on the organisational culture, practices and climate for learning. To date, however, the impact of programs beyond graduation has remained relatively unexplored. As a result, the reporting of participants' interactions with their teaching environments has followed a conventional plotline of individual teachers working within existing contexts and encountering barriers and enablers to action. The organisational learning environment became implicitly understood as a container in which action occurred and the socially constructed nature of this environment escaped scrutiny.

Social practice theorists have opened possible lines of analysis of UTD program impact that differ from both the Prosser and Trigwell (2006) and Kirkpatrick (Kirkpatrick & Kirkpatrick, 2014) models. These theorists have introduced new perspectives on learning in organisations by emphasising that organisations are social phenomena and that learning, particularly informal learning in organisations, is a social process. A social perspective on organisations and practices helps to identify some of the implicit conceptions of learning and change in research on UTD programs

Although the development of individual teachers' knowledge and experience is an important indicator of UTD program impact, it does not occur in a vacuum. Insufficient attention has been paid to how these programs work to improve the collective learning environment in which teachers do their work. Practice theory suggests that the intersection of understandings of people completing UTDs, and their workplaces, is likely to be complex, messy and even conflictful.

This study explores participants' experiences of the complex social interactions within their workplaces. I have sought to clarify what these workplace contexts are for medical educators, as existing studies do not detail the context in which the teachers continue to do their work after completing a UTD program. I interpret the stories they tell of introducing change into existing workplaces to better understand the processes by which they, through the UTD program, sought to have an impact on the organisational climate for teaching. This involves a shift in focus away from the individual teacher to the system of action in which the individual, the relevant organisation(s) and UTD program interact.

Social practice theorists have provided a means of re-evaluating learning practices in organisations. They considered the elements of organisational culture, organisational learning, practices and reflection on practice through a social lens. In doing so, they challenge us to find a way of transforming those elements through a different approach to analysing the impact of UTD programs.

Chapter 3

Methodology

The purpose of this study was to gain insight into the long-term contextual impact of a postgraduate qualification in medical education, as it is understood through the realities and experiences of participants. This requires a research perspective that can elicit a vivid representation of the nuances of participants' experiences. To date, much of the published research on the impact of university teacher development programs in higher education and medicine has used a deductive approach, in which the goal was to demonstrate that participants met prescribed program outcomes. Outcome measures have included attainment of pre-specified changes in conceptions of teaching and learning or attainment of intended program learning outcomes, exit competencies or performance indicators from the university or professional association. While reports on those indicators have provided valuable insights into the outcomes of UTDs at the level of both the individual program and the individual participants they may have explained little about what happens beyond the end of the program in the complex work environments in which the participants then have to operate. This study explores the participants' experiences in these more complex post-program environments by adopting an approach that is inductive, exploratory and open ended.

Participants' experiences were elicited through interviews conducted one to three years after graduation. The interview texts were interpreted through a philosophical research perspective informed by hermeneutic phenomenology (Laverty, 2003) to explore the impact of a UTD program as a social phenomenon and a lived experience. The study employed an iterative, cyclical process to analyse transcripts and other texts to better understand what occurs when graduates continue their education work after completing a formal program in academic development. This chapter presents an overview of the hermeneutic methodology and describes how the process was applied. The philosophical underpinnings of the methodology are explained and the processes of constructing and interpreting data are documented.

3.1 Interpretative Hermeneutic Phenomenology

Put simply, phenomenology is the study of the essence of phenomena (Kakkori, 2009). It is perhaps better conceptualised as a movement in philosophy that is never static and which continues to develop and be understood in new ways (Laverty, 2003).

Husserl's (1931/2012) elucidation of phenomenology as a philosophy and a mode of inquiry involved reduction and bracketing. Bracketing refers to the process of acknowledging and setting aside all one's prior understanding of an experience. This facilitates becoming open to discerning a description of a particular phenomenon, as it would be prior to reflection and prior to the experience being overlaid with meaning. Reduction involves distilling the description to the phenomenon to the essential characteristics without which that phenomenon could not be said to be itself (Dahlbert, 2006).

When Heidegger and, subsequently, Gadamer oriented hermeneutics to phenomenology, they broke away from Husserl's understanding of phenomena as the objects of description remaining separate from the subject. In the interpretative hermeneutic movement, texts and actions are not objects with independent meaning to be deciphered through objective interpretation. Rather, "meaning is negotiated mutually in the act of interpretation; it is not simply discovered" (Schwandt, 2000, p. 195).

Gadamer (1975/1989) argued that hermeneutics is not a procedure for understanding but an attempt "to clarify the conditions in which understanding takes place" (p. 295). Understanding, in the philosophical hermeneutic sense, always occurs within our pre-judgements, biases and traditions. We become more aware of these as we engage in a dialogue and a negotiation, for example with a text or with human actions, but we do not ever stand completely outside history, norms and values. Hermeneutic inquiry, then, begins with a process of reflection on one's own prejudgements and fore-projections (Holroyd, 2007). For Gadamer, however, it is essential that these reflections are incorporated in the process of interpretation rather than set aside to derive a pure description, as in Husserl's phenomenology.

3.2 Interpretative Hermeneutic Phenomenology in Health Research

Because they can be more holistic in their focus, studies of the lived experience of phenomena have played an increasingly important role in research in health. Several researchers in health have sought to clarify how a research study would proceed when it was informed by an interpretive hermeneutic phenomenology. Table 3.1 compares four studies, which have incorporated Gadamer's approach to the hermeneutic circle to create a research process as cycles of interpretation. These cycles involved moving backwards and forwards between parts and the whole of the texts and moving between the participants' and the researchers' understanding of the phenomenon. Each of these studies is discussed in more detail below.

Table 3.1

Study 1:	Study 2:	Study 3:	Study 4
Patterson & Higgs	Fleming, Gaidys &	Crist and Tanner	Austgard (2012)
(2005)	Robb (2003)	(2003)	
Five hermeneutic spirals	Five research stages:	Five phases:	Four steps
1. Create the texts	1. Decide on a research question	1. Focus lines of inquiry	1. Working out the hermeneutic situation
2. Explore horizons	2. Identify pre- understandings	2. Identify central concerns, exemplars and paradigm cases	2: Hermeneutic preparation: Identification of fore- understanding
3. Dialogue with questions and answers	 Gain understanding through dialogue with participants 	3. Cross-check shared meanings	 Hermeneutic dialogue with text including analysis
4. Fuse horizons	4. Gain understanding through dialogue with text	4. Create final interpretations	4. Fusion of horizons
5. Spiral back to the whole	5. Establish trustworthiness	5. Disseminate and generate readers' interpretations	

Comparison of Hermeneutic Research Studies in Health

Paterson and Higgs (2005), writing about occupational therapy, referred to spirals of interpretation. They distinguished five spirals of hermeneutic interpretation in developing a model of professional judgment. The first spiral involved creating texts (a literature review) to clarify their own pre-understanding and producing their interview questions, which were used to create further texts (transcripts of interviews and focus groups and a researcher's journal). In the second spiral, the researchers became deeply immersed in the text of the transcripts, identifying key concepts in the text and producing new sub-questions from their interpretations of the texts. In the third spiral, the answers to the sub-questions were clustered as themes. In the fourth spiral, the themes answering the sub-questions were used to answer the original research questions, thereby moving from the parts (sub-questions) to the whole (the overall research questions) to construct a model portraying the interpretation of professional judgment. In spiral five the model was critiqued by the researchers against the existing literature and by a reference group of practitioners. Within a hermeneutic circle, their approach emphasised the dialogic nature of understanding through developing answers to questions that then lead to new questions of the text.

Fleming, Gaidys and Robb (2003), writing for nursing researchers, referred to research stages. They suggested a five-stage approach. Stage 1 involved identifying a research question to elicit a "deep understanding of a phenomenon" (p. 117) which was the object of the study. Stage 2 was the evocation of pre-understanding through conversations with colleagues and searching the literature. Importantly, they emphasise that a Gadamerian perspective on pre-understanding sees it as a constantly evolving entity. The researcher, therefore, cannot approach pre-understanding as though it is a prejudiced understanding to be acknowledged and set aside. Rather, pre understandings will change as the researcher engages in conversations and interpretation throughout the research process and it is important for the researcher to "periodically review their pre understandings . . . to remain oriented to the phenomenon" (p. 116). Stage 3 was characterised as a dialogue between the researcher and the interview transcripts, and stage 4 was the analysis of texts (transcripts, researcher's journal, audio recordings and field notes). This analysis was performed via a hermeneutic process of moving from the whole to the parts, which the authors described as a cycle of four steps similar to those identified by van Manen (1990):

47

- 1. Finding one expression in each transcript that captured the meaning of the whole text.
- Examination of each sentence for its meaning and the production of themes. The themes were examined and challenged in light of the researcher's preunderstanding.
- 3. Movement back to the whole by relating each sentence to the meaning of the whole and expanding the meaning of the whole. This is unlike van Manen's approach, which, according to the authors, does not include this movement back to the whole.
- 4. Identification of passages that illustrated the shared understanding between researcher and participant, which would help provide the reader with insight into the phenomena of interest.

In stage 5 they established the trustworthiness of the research through clear documentation of the research process for auditability and used direct quotations from participants to maintain credibility with the reader.

Crist and Tanner (2003), writing about perspectives of family care in nursing, referred to five phases of interpretation. Phase 1 was an examination of the transcripts from the first few interviewees so that the questions or "lines of inquiry" (p. 203) were amended and refined. In phase 2, the research team identified emerging themes or central concerns. A three-to-five page summary of central concerns and illuminative extracts was written and shared amongst the research team; this process of writing and rewriting was seen as central to the process of interpretation. Exemplars were also derived from the texts. These exemplars were instances or part stories from a single participant that characterised a common theme or meaning across several participants. A written commentary on the exemplars and summaries was circulated and the process of naming (and renaming) themes began. Phase 3 developed a short (one sentence) summary of the shared meaning across all the participants. In phase 4 more summaries and notes were generated, discussed and clarified. In phase 5 the research reports were completed and readers began their interpretation of the texts.

Austgard (2012), writing from the perspective of nursing, referred to four steps of interpretation. Step 1 involved generating an open question relevant to the

phenomenon and the hermeneutic approach. Step 2 identified the researcher's preunderstanding through an examination of the literature and consultation with colleagues and others, which provided an entrée into a hermeneutic circle. Step 3 created a dialogue with the text, moving between interpreting the meaning of the whole text to the meaning of the parts and analysis by searching for meanings and seeing patterns as thematic threads in meaning. Step 4 involved the hermeneutic fusion of horizons, that is, the clarification of the researcher's understanding by merging the old understanding of the phenomena with the new interpretation emerging from the analysis of new texts and writing this up for further interpretation by the audience of new readers.

These four studies all represented interpretation as a circular, iterative process. They moved backwards and forwards from parts of the text to the whole text to produce meanings, further questions and new understanding. They recognised and uncovered their own pre-understandings and assumptions to re-interpret aspects of interest and produce understanding through dialogue and conversation with people and with texts. These shared features provide a common interpretation of hermeneutic phenomenology as a philosophical movement of interpretation rather than a rule-bound research method.

Despite this shared terrain, there are also differences in terminology and process that indicate that a hermeneutic approach can be fluid and that researchers can choose their own path within it. The approach I have adopted shares many of these commonalities: identifying pre-understandings, generating texts, immersion in those texts, clarifying understandings through that immersion and extracting illustrative examples. In the following section, I explain how I have shaped these into a methodology appropriate to this study.

3.3 Research Process

The present study used a research process comprising four stages: orienting to the phenomena, clarifying understanding through dialogue with participants, gaining understanding of the whole text, identification of themes and interpretive writing and thematic grouping.

3.3.1 Stage 1: Orienting to the phenomena

Since interpretative hermeneutic phenomenology is a philosophical movement interested in becoming open to the world (Wilcke, 2002), researchers need to orient themselves to the philosophical thinking on which the approach is based and acknowledge how this has affected the study. Researching using this methodology requires "[t]he overt naming of assumptions and influences as key contributors to the research process" (Laverty 2003). I have oriented myself to the phenomena being investigated through both a critical exploration of the literature around UTDs and through reflection on my own role as a medical educator and coordinator of a UTD program.

Through the literature review, I began to understand the existing research agenda as one in which it was important for researchers to prove that university teacher development programs met particular predetermined indicators of impact. Those texts helped me to see an historical emphasis on program impact in terms of measurable changes in individual perception and practice. Although some authors indicated where there should have been consideration of the wider impact on education practices, these were often left as dark, unexplored corners of participants' experiences. This literature acknowledged, for instance, that broader effects on assessment and curriculum would take time to appear.

Much of the research that looked at the effects of formal academic development programs had used survey methods to determine the impact of the program on participants. Where interviews had been undertaken, they were used to bolster the survey findings, rather than to provide a deeper exploration of participants' experiences through qualitative analysis. Survey-focused research created a snapshot of program impact at the immediate end of the program. From my reading of this literature, I sensed that interviewing participants well after they finished the program would make it possible for longer-term and varied educational changes to become part of participants' stories and would place any such changes in the full context of their post-UTD histories, giving a richer picture of impact in context than that provided by survey-focused research. By interviewing the participants one to three years after they had completed the program, I sought to encourage them to tell their own stories in a way that explored their own interpretations and contexts (Kvale & Brinkmann, 2009).

As the coordinator of a Master of Medical Education program, I had encouraged the participants to analyse and critique the education activities they used in their work and to develop plans and projects for renewing and revising those activities. At the start of this study, my aim was to find out what changes participants had implemented in their home organisations as a result of obtaining a postgraduate gualification in medical education. I wanted to know whether they had been able to implement their plans and change the teaching, learning and assessment activities in their own work settings. Furthermore when I started the study I was a researcher and academic within the organisation that offered the program. These roles afforded me something of an insider-researcher's experience. Dwyer and Buckle (2009) describe insider research as research into a group in which the researcher can be construed as having membership, shared experiences and common language with the participants, but where there will never exist a total sameness with the group. Reflecting on my roles was an essential part of my hermeneutic process. In the hermeneutic research approach, the researcher is never 'outside' the phenomenon of study. They will always have a relationship with the phenomenon, because they come with an understanding of the phenomenon they seek to explore. The explication of this relationship continues throughout the research but begins, as I've done here, with consideration of my own pre-understandings emerging from and inherent in my position as both a researcher into and a convenor of a UTD program.

The overall research question was developed further through this role reflection as I started to wonder what happened to the curriculum alignment maps and the plans for change that participants submitted as their assessment tasks throughout the program. In line with principles of authentic assessment (Herrington & Herrington 2006), these tasks had asked participants to draw on their individual contexts and experiences to develop strategies and plans for improving learning and teaching practice within their own departments and institutions. The intention was that participants could, when the opportunity arose, implement their plans to effect change in their organisations. As I talked to colleagues about my ideas and questions,

it became clearer that my research interest was in curriculum design and educational development, as these were the areas on which I focused my work.

For the hermeneutic researcher, the continuous process of orientating to and reflection on the phenomenon of study is a notable aspect of establishing the trustworthiness of the interpretations presented to the reader. Presenting the researcher's consideration of the historical and social conditions under which the questions and interpretation of texts emerged, allows the reader to consider the truthfulness of the research processes (Fleming, Gaidys & Robb, 2003). The initial impetus for my research was in part driven by calls from academia for better evidence of the effectiveness and impact of UTD programs. I realised, however, that impact research that identified what changes teachers had been able to implement post-program would only provide me with a descriptive categorisation of the effects of the program. I could identify the changes participants reported having made in their own teaching and classroom settings and the changes they reported having made, or having attempted to make, in the broader organisational settings of projects and committees, but this would not help me to reach an understanding of how and why they did or did not do so, what effects their actions had and what they saw as mediating factors in the success or otherwise of their actions.

My goal was also to give the participants an opportunity to voice their concerns and to reveal what they saw as the important talking points in their education work. In focussing on participants' experiences it was possible that they would provide lengthy and detailed descriptions of their own specific situations and experiences, and these may not have resonated more broadly with a possible readership of academic development program leaders. To address this audience, the analysis, therefore, needed to draw on a nuanced and deeply contextual description of individual experience and generate interpretative findings that would resonate with that readership.

3.3.2 Stage 2: Clarifying understanding through dialogue with participants

Hermeneutic phenomenology involves entering into a dialogue while maintaining a stance of openness (Wilcke, 2002). For Gadamer, meaning is produced through the interplay of dialogue between speaker, listener and reader (Sammel, 2003). The goal

of dialogue, therefore, is not to understand the individual, but to come to an understanding of that about which they speak. For the hermeneutic researcher, interpretation occurs constantly and is produced through ongoing dialogue with people, with texts, and with our own prejudgements from history and tradition. Interpretation is not understood as an objective depiction of participants' understanding. Our interpretation is continually redefined, a process which Gadamer (1975/1989) characterised as the fusion of different horizons of understanding, which occurs as the researcher's horizons are questioned and challenged by dialogue with the text or with the research participant. The new perspectives derived from this interpretation are the researcher's new understanding of "socially situated meanings, habits and practices from a person's experiences, thereby allowing common, takenfor-granted or concealed meanings and social practices to become more visible and intelligible for others" (Matua & Van Der Wal, 2015, p. 25).

I chose to conduct interviews, as these would give me the opportunity for dialogue through face-to-face interactions and conversations with the participants. Each interview lasted from one to one-and-a-half hours. The overall question guiding the interviews was: "What is the experience of a participant from the Masters program one to three years after graduation". Through interviewing, I believed we could explore in detail the diverse work contexts and education experiences in which the participants were engaged. I could ask for clarification when needed and for examples or specific instances to illuminate general or abstract responses. As an academic developer, I have experience talking to staff about education issues. I work with staff members who seek to solve particular education issues that they have identified as important. To support their efforts, I draw out their perceptions of their teaching and work contexts to understand how they interpret the issues they face or how they approach introducing changes, such as changes to teaching or assessment. With this experience, I believed I could encourage the participants in this research study to reflect on and talk about their experiences in a deep and detailed way.

I developed an interview guide and demographics sheet (Appendix E and C) from my review of the literature on the effects of academic development programs for university teachers and medical educators. The demographics questions were drawn from similar questions developed by Prosser et al. (2006). The interview questions, however, were developed to address those areas of the participants' experiences traditionally ignored or overlooked by survey-based studies. In particular, they were designed to elicit personal reflections and narratives of the participants' experiences of program impact as a tangible aspect of their work life after the program. I sought advice on the wording of these interview questions from two senior academic colleagues who coordinated and taught in the academic development program for university staff at my university. I tested the interview questions in the guide with a colleague who was a graduate of the Graduate Certificate in Higher Education Teaching and Learning course at the University of Technology in Sydney, Australia. This course was similar to the Master of Medical Education. After testing this guide and gaining feedback from my test participant, I reduced the overall number of questions and made each question slightly simpler and shorter.

The interviews were semi-structured. This means that I set out the questions I wanted to ask in the interview guide but I was able to deviate from those questions to follow other relevant directions as participants raised them. This semi-structured approach is consistent with an interpretive hermeneutic tradition, wherein the questions seek to elicit detailed descriptions of participants' experiences and prompt them to provide illustrative examples of those experiences (Lopez & Willis, 2004). In retrospect, however, my interview guide did not need to have as many questions (14) as it did. By the second interview, the conversations were quite free flowing and required only the occasional probe or prompt. Participants often covered the territory of each question without my having to ask it.

The recruitment process involved emailing an invitation to participate (Appendix A) to all graduates of the course. These were sent on my behalf by the medical education unit's administrative assistant. A reminder email was sent a fortnight after the first invitation. For participants whom I interviewed at their hospital workplace, I gained permission to enter the hospital setting through an email to their supervisors (Appendix D).

The interviews were conducted from July to September 2009 and were recorded and transcribed for further analysis. Of the 40 graduates who were invited to participate, eleven agreed to do so. Most of the interviews took place at their workplaces or in a

meeting room in a location familiar to them. Three participants were overseas or interstate and we spoke via telephone.

The participants filled out a one-page sheet with their demographic details at the start of the interview. This sheet included their name, age group, job title, the year they had finished the course and the name of the institution in which they worked. Collecting these details at the start of the interview helped me to make some of my questions more specific by using the correct date or job title.

I began the interview by asking participants to tell me about where they were currently working and what their responsibilities were. This question gave me information about the focus of their teaching and education work. It also helped to put them at ease because they were talking about a familiar topic, and to bring their education work to the forefront of their minds. I noted that, when the first interviewee provided illustrative examples of their work, they talked about their work with colleagues, such as in education committees. This was an aspect of participants' work that had not been highlighted in my earlier literature review. After the first interview, I added some prompts about this to the interview guide for use if the participant did not mention it directly. I also turned back to the literature to clarify my understanding of participants' interpretations of their interactions with others as an important post-UTD program experience.

After this broad opening question, I asked participants what they remembered about their reasons for enrolling in the program. This was intended to help them recall their initial motivations and work role in contrast to their current circumstances. After setting the context in this way, I moved on to a series of questions related to what they remembered from the program that they had found useful. Almost all participants remembered two concepts—focusing on what students do to learn, and enhancing the curriculum by ensuring there is a constructive alignment between the objectives, learning activities and assessments. Several also talked about the independent studies projects they had researched or piloted. I then explored what effects the participants felt the program had had on them. Several people talked about feeling more confident and knowledgeable, others talked further about the new projects or activities or assessments they had introduced in their own teaching. I probed for further illustrative examples of changes they had been able to make in their work. Several people began to talk about changes they had introduced in their own teaching and also in the wider curriculum. Two participants noted changes in their own confidence and changes in their own ideas about teaching, but stated that they had not had the ability or interest to make broader changes. In this phase I also asked some questions about whether colleagues, students or family would have noticed these changes. These questions required participants to formulate an opinion regarding another person's views. As a rule, they felt unable to speak legitimately or accurately on behalf of others and either deflected or avoided answering the questions or gave superficial or speculative responses. These responses added no information to what had already been generated in response to earlier questions and created no additional insights; therefore they were excluded from the thematic analysis.

I then moved to exploring broader ideas. In the final phase of the interview, I returned to the idea of felt or introduced changes, iteratively rephrasing the questions in a broader, more abstract way. I asked if there were things they were doing differently now, if there had been anything unexpected that had come about from the program and if there were things they wished they could be doing and changing. These questions often produced thoughtful pauses in the conversation, followed by stories of changes they had introduced or had tried or wanted to introduce and the consequences of their successes or otherwise. As the interview progressed, I needed only to give a few elaboration probes such as "what do you mean by..." or "could you say more about ..." to keep delving into the participants' descriptions and interpretations of the events. In these stories, participants started to describe the more negotiated, relational and social aspects of their environments. They moved away from talking about changes only in their own classrooms to talking about working with colleagues, being on committees and in other shared endeavours in education. This reinforced the new area of focus—curriculum change as a social phenomenon which had also emerged from the first question.

At the end of the interview I thanked the person for their participation, reiterated the purpose of the study and finished by asking if there was anything further they wanted to add or ask. A few asked me about how the research was progressing or how my studies were going, but no further information relevant to the study emerged. Each interview lasted approximately one and a half hours.

I used a reflexive process of debriefing with field notes to enhance the quality of the oral interview dialogue and the dialogue with the texts produced from the interviews. Immediately after each interview, I wrote 1-2 pages of notes as a way to reflectively debrief on the interview process. I made some field notes about what I saw at the location of each interview, how I felt the interview went and what modifications I might make to improve the next one. I noted whether any new or particularly interesting issues had emerged which I had not encountered in previous interviews or in the literature.

3.3.3 Stage 3: Gaining understanding of the whole text

Gadamer's hermeneutic approach to text emphasises the importance of the spoken word as text over the more common understanding of the written text (Fleming, Gaidys & Robb, 2003). The voicing of the text engenders a kind of dialogue from the immediacy, the tone, and the timbre of the spoken interaction (Davey, 2000). To maintain this emphasis, I examined the written transcripts together with the audio recordings.

At the end of all the interviews the recordings were professionally transcribed. These verbatim transcripts formed the texts for analysis and the professional transcription service helped to speed up the creation of these texts. So as not to lose connection with the data, I read through the transcripts whilst listening to the recordings. The spoken word (recorded interview) was treated as a text, just as the written transcript was a text. To maintain a sense of individual participants, their pre-UTD program contexts and their contexts at the time of interview, I began to develop a casebook for each participant. At this early stage, the entry for each participant was 1-2 paragraphs, as shown in Figure 3.1.

3.Nicole

At the time of the interview, Nicole is in the same education role in the hospital as she was when she began the program. She is a part time lecturer in the medical school of a large outer metropolitan hospital in Sydney. In her role she coordinates the intake (rotation) of medical students for her specialty [Specialty F] in her hospital. This is done in conjunction with other academic staff and administrative staff. When she began the program she was also working as a visiting medical officer. She has since given up the VMO role to commence another, different, Masters degree.

She decided to begin the program after working closely with a Masters-qualified medical educator at her hospital. Nicole felt that she had learnt a lot from her colleague and had been encouraged to think critically about education. Nicole had become conscious that most doctors had very little training in education or in supervision even though they are required to do a lot of supervision. She had the support (and to some extent the financial support) of the professor in her discipline at the hospital. She saw the degree as a way to formalise what she had learnt from her colleague, to do more critical thinking around education and to do independent study.

Figure 3.1. Example of casebook extract of individual in context.

I listened to each interview several times, and made annotations in the margins, to note down ideas and elements in the participant's texts and the thoughts and feelings this evoked in my reading of the texts. It took approximately two hearings to make corrections to the transcripts and a further three hearings to annotate the whole text of each interview. These annotations were re-written into notes that formed the precursor material for the next stage of interpretive writing. Hermeneutic inquiry's "processive, open, anticipatory character of the coming into being of meaning" (Schwandt, 2000, p. 195) highlights the cyclical nature of the perspective. This hermeneutic process of inquiry is achieved through iterative cycling between a specific focus on the elements of an experience and drawing back to look at the whole of the experience, continuing back and forth until an understanding is reached which, for that moment, offers stable meaning (Laverty, 2003).

This cyclical process captures what hermeneutics believes is involved in the process of understanding (Schwandt, 2000, p. 196). The meaning of parts of a text—such as a sentence or a paragraph in an interview transcript—"cannot be examined independently from the meaning of the whole text, for their meaning changes according to its unfolding" (Dobrosavljev, 2002, p. 607). In stage three I began with a focus on the individual stories. As I read the texts line by line, understanding of the

whole text developed, so each line changed my understanding of the whole. As my understanding of the whole text developed, however, I also started to interpret each line in a particular way. In this movement within the hermeneutic circle, attention to both the whole and the parts of a text are important and this unfolding of meaning can be expected to change over time.

3.3.4 Stage 4: Interpretive writing and thematic grouping

To gain a deeper understanding of participants' actions and experiences I undertook an iterative process of interpretive writing similar to that described by Crist and Tanner (2003). I began the process of interpretation by writing up summaries of each participant's experiences, derived from the notes and annotations in stage 3. These first summaries were five-to-seven pages long for each participant and included illustrative quotations from their interview transcripts. The interpretation developed and recurring elements became apparent as these summaries were written, revised, discussed with supervisors and colleagues, rewritten and revised again. Each summary was rewritten up to five times. This process of rewriting, revising, consulting with others was a generative dialogue with the texts and the beginning of a fusion of horizons of the researcher's understanding with a new understanding from the various texts (Austgard, 2012).

From these individual participant summaries, I assembled short descriptions of what seemed to be the salient elements within each participant's experiences. To clarify the meaning and relevance of the elements for each participant I assembled these into a table format. Table 3.2 shows an example from the table with one element (recognition of education as vocation) and my descriptive paragraphs for two participants. This table format enabled easy visual identification of the presence, absence and meaning of each element across different participants.

Table 3.2

1 0		
Element	Baden	Tara
Item 3 –	Baden talks about the role of the	Tara talks about the influence of the
Recognition of	course in directing his career. The	degree upon her choice of career, as
education as	words he chooses are strong and	"validating" her career interests and
vocation	resolute—"solidified",	validating the strengths she brings to
	"crystallising", "life-changing".	the job and her identity as a
	Establishing a path in education is	professional in medical education.
	the first thing he mentions when	
	asked what he remembers about the	She now feels she has a language
	course that he has made use of.	with which to describe theoretical
		concepts in education (e.g.
	Baden talks about being "lucky that	constructive alignment) and the skills
	the right job did come up", but his	to apply these concepts.
	descriptions also talk about how the	
	course seemed to help him make his	
	own luck in some senses, with	
	colleagues recognising his interest in	
	education and the course becoming	
	what "differentiated" him.	

Example of Illustrative Excerpts by Element and by Individual

The table depicted the overall effects of the program. It superficially answered the research question—what happened to participants? I came to realise, however, that reading the texts in this tabular format placed the focus on participants' actions but had not illuminated the meanings of these actions and experiences. The table was a useful tool for identifying the specific events and interactions that had become important to people, but this downplayed the emotions and intentionality that had permeated participants' experiences as they were recounted in the text. In the phenomenological sense, intentionality is the way in which people meaningfully connect with the world— that is, with others, with ideas, with a profession or even with objects such as a chair or lectern—and these intentional relationships may manifest as frustration, confusion, hope or wonder or other emotion-imbued experiences (Vagle, 2014).

The inherently reductionist approach of breaking the participants' texts into elemental fragments risked turning their experiences into a disconnected set of actions embodied in the patterns. Increasingly, I felt that a holistic representation of their experiences would better preserve the connections and honour the participants' sense of a single unified experience. Further, the splintering of the texts into elements was creating the illusion that participants were operating and reporting in a context-free vacuum in which ideas emerged and were translated into actions without any regard for the participants' professional and organisational settings.

An analysis focused on individual actions and on the individual's accounting for those actions was inadequate to demonstrate the significance of actions within participants' working contexts—for example, within the history of their profession and within the culture of their workgroups. It became necessary to look at the literature again from this new perspective. The first literature search had focused on the reported effects of academic development programs. This next literature search focused on how practices, such as education practices, are conceptualised. The work of practice theorists, such as Theodore Schatzki, helped to focus the analysis further on participants' experiences of the collective education practices in their professional and organisational contexts. Schatzki (1997) describes practices as a nexus of "interwoven activities in a given social domain" (p. 285). To explore educational change, therefore, a move away from the individualist focus and towards a focus on practices became important.

A focus on practice looks at performances within socially constituted contexts rather than focussing on the individual performer. As Geertz (1975) explains, when culture is understood as the "webs of significance" which man himself spins, the analysis of culture is "not an experimental science in search of law but an interpretive one in search of meaning" (p. 7). Rather than developing, as Miles & Huberman (1994) suggested, a strong explanation of what, how and why participants' actions and experiences occurred as they did at an individual level, I began to see participants' experiences of making educational changes as socially situated. The renewed investigation of the literature created a new horizon for understanding what it meant for participants to cooperate with other people to change aspects of education within their workgroups and organisations. From this new horizon focused on education work as practices that are collectively perpetuated, I returned to the earlier participant summaries and descriptions of elements. I re-read the transcripts and listened again to the recordings of the participants. Following my re-immersion in these texts, the settings within which participant's actions and experiences were situated became a more overtly crucial feature of their experiences. It seemed that the settings in which education was practiced was something that needed to be made central to the interpretive writing rather than pushed to one side.

In re-orienting myself to the importance of the settings of actions and experiences it became apparent that participants' accounts constituted a pattern of three broad loci of interactions: interactions with students, with colleagues and with the profession. From the holistic idea of practices located in particular settings, came these three loci, or as I labelled them, three central concerns. These central concerns were eventually reflected in the titles of the findings chapters of this thesis. As van Manen (2014) notes, overarching concepts such as these central concerns allow the interpreter to grasp and know the phenomenon under study, but it is important that in the abstraction of the concept, a focus on the participants' lived experience of the concept must continue. Viewed from the perspective of these three overarching changes to individual perspectives and behaviours but also changes in educational practices embedded in the different contexts.

These central concerns enabled me to begin to construct thematic groupings from experiences, ideas and beliefs which participants reported. I constituted these experiences and ideas as themes following van Manen's understanding that developing themes is "not a rule-bound process but a free act of 'seeing' meaning" (1990, p. 79). This allowed for not only the initial construction of themes but for the thematic groupings to shift and be reformulated as I moved backwards and forwards through the texts in a hermeneutic circle. The construction of themes is akin to the assigning of concepts and themes in many forms of qualitative research, but in hermeneutic research its emphasis is a "dialogical, iterative process between the text and the researchers" (Crist & Tanner, 2003, p. 204) hence the need for themes to shift and be reformulated.

There is an acknowledged tension in qualitative research between approaches based on a more formal process of coding elements and extracting themes and more holistic hermeneutic approaches. I chose to follow Holloway's and Todres's (2003) advice to treat thematising meanings as a common element of qualitative research and to construct thematic groupings when interpreting and analysing texts. However I did not let these themes constrain the analysis and would use them in parallel with holistic readings of the texts to enable me to "transcend these tensions and include these concerns in a third position that can allow flexibility as well as consistency and coherence" (Holloway & Todres, 2003, p. 346). These thematic groupings provided some scaffolding as I moved backwards and forwards from the parts to the whole of the participants' accounts in the search for meaning. Austgard (2012) describes themes as the "keys that open up for a deeper understanding and meaning of the question asked" (p. 832).

I used these themes to develop an understanding of the meaning of the experiences in the texts I was generating, that is, in the production of thematically grouped interpretive passages, interspersed with illustrative quotes from participants, and arranged under each central concern (forming draft thesis chapters). In meetings and through the exchange of drafts, my research supervisors reviewed the trustworthiness of the interpretations in these texts as they annotated and discussed them throughout the process of interpretive writing. Their reviews acted as an additional horizon of understanding, iteratively clarifying and confirming the meanings and reporting of the central concerns and themes (Paterson & Higgs, 2005).

I also sought to maintain the credibility of the research through internal consistency by referring back to participants' transcripts to ensure my analysis and interpretation was always grounded in the participants own accounts. As Finlay (2014) points out, in phenomenological research it is important to "bring readers into a closer relationship with the phenomenon" (p. 133). To do this and to enhance the trustworthiness of the meanings drawn from the various research texts, I made extensive use of participants' quotes to show how the interpretations emerged from a genuine dialogue with the texts. In the hermeneutic way, the texts are then reinterpreted through the reader's horizon of understanding and the hermeneutic circle continues.

3.4 Ethical Considerations

Exploring the experiences of other human beings emphasised the need to act responsibly and ethically in undertaking this study. In drawing out, interpreting and reporting these experiences it was vital that I protected the welfare of the participants and respected their rights to dignity, freedom and privacy. To achieve this, I acted according to the ethical principles and guidelines as outlined in the National Statement on Ethical Conduct in Human Research (NHMRC, 2007). I received formal approval to conduct the study from the University of Sydney Human Research Ethics Committee in 2009 (Ref. No. 11536, Appendix F).

Graduates were free to opt in and opt out of the study and I took care not to coerce or pressure them for involvement. The recruitment was done by email invitation so that they could choose to reply if they wanted to participate but were not required to make contact to decline the invitation. Participants were able to opt out of the research at any time, before, during or after the interviews. I explained this option to withdraw from the study in a consent form emailed to participants the week before the interview and I explained it verbally at the start of the interview. The participants were given my university contact details and the details of Dr Robert Heard, the principal investigator, as the point of contact for withdrawing from the study.

The graduates were given information about the purpose of the study and how any information they divulged would be anonymised and reported in research reports and publications. These details were outlined in an information sheet that was sent with the emailed invitations to participate in the study (Appendix A). I also gave the participants a hard copy of this information sheet at the start of the interview and, at the same time, verbally explained the main points on the sheet to them. The participants read the information sheet at the start of the interview and I gave them a consent form to sign when they were ready (Appendix B). One participant asked to take the consent form after the interview in order to-read it more closely prior to signing. This participant subsequently did not grant permission for their interview to be included in the research. The decision to proceed was in the participant's control and the interview was not used in this research.

The interviews were recorded so that I could later transcribe and review what was said. I let the participants know that I wished to record the interview for this purpose and verbally gained their permission to record. The permission was also sought in writing on the consent form. The recorder was small and unobtrusive and did not seem to disrupt the flow of the interviews. The recordings were later transcribed by a company which offered a secure digital service and which was commonly used and recommended by university researchers.

I took care to maintain the confidentiality of the participants. The recordings and original transcripts were kept in a locked cabinet in my locked university office. I was the only researcher to listen to the recordings. The transcripts and all excerpts from the transcripts were de-identified with permanent removal of identifying details such as names of teachers, employers and institutions. A master list of these identifying details was kept in the locked cabinet with the recordings and transcripts. Only de-identified data using fictional names was reported.

3.5 Summary

One of my reasons for choosing this method was that previous studies have tended to approach impact as an object or series of items to be reported on, often at the end of the program, and via pre-determined indicators. That has minimised the idea of impact as an experience, interpreted and understood by people over time and in different contexts. The choice of the hermeneutic method fits well with an understanding of higher education as the domain of reflective and critical human beings (Barnett, 1997) who are embedded in a multi-layered network of relations with hyper-expansive professional expectations and opportunities (Boyd, Smith, & Ilhan Beyaztas, 2015; Marginson, 2000).

Hermeneutic phenomenological approaches meaning as the interpretation of phenomena as they are experienced. In this study I focus on the phenomenon of longer-term program impact as is it is experienced and understood by the participant, the researchers and to some extent the reader of this research. The hermeneutic meaning of impact is not about uncovering a stable reality or true definition but about refreshing and clarifying the interpretation of impact as a lived phenomenon. It is not an easy endeavour to use these philosophically based approaches as a research process. Although there are examples of step-by-step phenomenology research methods, the hermeneutic imperative is that interpretation of texts is an idiosyncratically human enterprise that will be different for every person that undertaking it. The steps in the research process are therefore there to be rewritten by each researcher as they bring their existing understanding, ways of seeing meaning and progress through unique fusions of horizons of meanings with various texts.

The particular important and overlapping aspects of the research process in this study were:

- The recognition that the researcher's prior understandings (preunderstandings) are always present and are therefore incorporated in producing meaning. While this recognition was most visible in stage 1, with the initial literature review and reflection on that literature and my history and role in the UTD program, it in fact continued in each stage at every point of encounter with texts.
- 2. Interpretation is continually redefined as the researcher engages in dialogue with the text to fuse her or his own horizon of understanding with those in further texts. This aspect highlights the continual production and interpretation of texts at each point of the process, from the interview questions and documents in stage 2, to transcripts and casebook in stage 3, and the summaries, tables and drafts in stage 4.
- 3. Understanding is a cyclical process of moving backwards and forwards from specifics to the whole and backwards and forwards from exploring existing understanding to re-defined meanings. This aspect recognises that the dialogue between researcher and texts is iterative, allowing new understandings to evolve, such as in stages 3 and 4 when distilling the participants' transcripts into salient elements made it apparent that certain meanings were downplayed and risked being lost. This precipitated a further movement from these parts of texts back out to the literature to better understand the meaning of context and practices in the participants' texts.

66

Chapter 4

The Program and Participants

In this study I have sought, in the hermeneutic way, to move towards a new understanding of a phenomenon—the impact of a postgraduate qualification in medical education, the Master of Medical Education program, as it is experienced by participants. My starting position was an understanding of how program impact was already defined in the evaluation and research studies of training programs, postgraduate programs in medical education and university teacher preparation (UTD) programs. From this basis, I opted to use the following broad definition of impact proposed by Rugg (in UNAIDS, 2010), namely, the long-term, cumulative effects of the programs over time on what it ultimately aims to change, such as a change or reduction in the issues, problems and consequences that created the need for the program.

In this chapter I outline the history and aims of the Master of Medical Education program at the University of Sydney and the backgrounds of the program graduates who participated in this study. I begin from the horizon of the program—the curriculum, structure and history of its development. I then move towards the participants' horizons, exploring their connections to the lived realities that initially led them to feel a need to enrol in the program. These felt needs are then used to provide context for the analysis of how participants used ideas from the program within their own practices.

4.1 The Master of Medical Education Program

The UTD program that is the object of my research is the Master of Medical Education. The Masters was a postgraduate degree program offered by the University of Sydney, Australia, and taught by academic staff in the university's Medical Education Unit. I was involved with the program initially as a subject coordinator and teacher in 2007, and then as a program coordinator and teacher in 2008.

As was common practice with Australian postgraduate qualifications at the time, the program was articulated so that participants could exit with a Postgraduate Certificate, Diploma or Master of Medical Education. Table 4.1 shows the credit points and duration of the program as set out in the 2009 faculty handbook (University of Sydney, 2009). To complete the Masters program, for example, participants were required to complete eight subjects (6 credit points each) in a minimum of 1 year of full-time study or a maximum of 2 years full-time or 4 years of part-time study.

Table 4.1

Program (Course)	Credit points for award	Duration full-time	Duration part time
GradCertMedEd	24	0.5 year	0.5 to 2 years
GradDipMedEd	36	1 year	1 to 3 years
MMedEd	48	1 to 2 years	1 to 4 years

Program Award, Credit Points and Duration

In part-time study mode, participants would normally complete two subjects per semester requiring a total commitment of 20 hours study time per week for two 13-week semesters in a year. In on-campus mode, each subject comprised one three-hour fortnightly evening class with further online participation and independent study required between classes. The core subjects in the program were also offered in fully online mode in which the fortnightly evening classes were replaced with additional online activities. The online mode helped to make the program more accessible to interstate participants and those whose work required travel.

The Masters was a development program for medical teachers. It was a voluntary, fee-paying formal course ending in a postgraduate qualification. The participants were, in the main, either clinical educators or academic medical educators. Clinical educators were usually medically qualified professionals who worked in a university teaching hospital, clinical school or community medical practice. Many clinical educators had medical and education roles; they worked as medical specialists in the hospital or medical practice and provided clinical supervision, teaching or tutoring to

medical students and trainee specialists. Academic medical educators who enrolled in the program were generally university lecturers working in a university faculty of medicine, often with medical or science qualifications.

Clinical educators located in any of the University of Sydney's clinical schools or teaching hospitals were encouraged, but not required, to undertake the program and were offered a subsidy on their course fees as an incentive to do so. To remain viable, however, the program drew participants from across Australia and internationally. Each year the program had an intake of approximately 20-30 participants. During my time as a teacher in the program (2008-2009), international participants made up approximately one-third of the cohort each year. This included participants on scholarships from the Asian and Oceanic regions. The formal education of university teachers had been identified as a priority by developing nations in Asia and international aid agencies in the region, and scholarships supported by the United Nations and national governments provided international study opportunities (UNESCO Institute for Statistics, 2014).

The program aimed to help participants develop a deeper understanding of principles and practices underpinning teaching and learning in medicine, and to help them improve their skills in developing curriculum, assessment and evaluation. The program sought to improve the quality of medical education by developing the knowledge, skills and attitudes of the professionals who worked in medical education. This was documented in the program's intended learning outcomes as reproduced below from the 2009 faculty handbook:

Students will emerge from this program with:

- enhanced skills in medical curriculum development, implementation and evaluation, and student assessment;
- 2. a proactive approach to continuous quality improvement in teaching and learning in medicine;
- 3. a deeper understanding of principles and practices which underpin teaching and learning in medicine and the health sciences; and
- 4. attitudes to medical education which reflect best-evidence and learner centredness (University of Sydney, 2009, p.3)

4.2 Comparison with Central UTD programs

The Master of Medical Education was developed and taught by staff of the Medical Education Unit in the university's Faculty of Medicine. It ran alongside the preexisting university-wide UTD program that was created and run by the university's central learning and teaching unit. The Masters program was developed by the unit to provide a customised version of a UTD program for medical educators, so as to be more directly relevant to medical practice and teaching in clinical settings than the university-wide program. Despite this, the core curriculum incorporated the same key concepts that were identified as common in centrally-run UTD programs in a survey of postgraduate certificates (PGcert) in higher education teaching and learning in 46 universities across Australasia and the United Kingdom (Kandbinder & Peseta, 2009). Table 4.2 identifies the core and elective subjects in the Masters programs. Many central UTD programs are offered at the shorter PGCert level. The Master of Medical Education aimed to provide more opportunities for research and a deeper engagement with the twin disciplines of medicine and education.

Table 4.2

Master of Medical Educat	on: Key Concepts	and Subjects
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Subject in the Masters program	Key concepts in postgraduate certificates in	
	higher education (Kandlbinder & Peseta, 2009)	
Core subjects		
Teaching and Learning in Medicine	Student approaches to learning	
	Constructive alignment	
Scholarship of Teaching and Learning in	Scholarship of teaching	
Medicine		
Electives		
Independent Study Project A & B	Scholarship of Teaching	
	Reflective practice	
Assessment in Medical Education	Assessment driven learning	
Problem Based Learning in Medical	Student approaches to learning	
Education	Constructive alignment	
Interprofessional Teaching and Learning	Reflective practice	

The Masters program came into being because there were few formal education programs for medical educators and clinical teachers in Australia at the time. The need for such a program became more acute when a major internal review of the Sydney medical degree necessitated different approaches to teaching, learning and assessment (Sefton, 2006). The faculty's new problem-based learning curriculum in the substantially revised medical degree was different in both educational philosophy and method to the teaching and learning practices in the traditional curriculum. This difference was particularly salient because it contrasted with what the majority of the existing medical workforce, and the educators and clinical teachers in that workforce, would have experienced when they were medical students and trainee specialists. As a result, it differed from what they would have expected as 'normal' teaching and learning practices (Sefton, 2006).

The Masters program was also made possible by changes to the educational leadership and philosophy of the faculty, changes that were tied to the major project of curriculum change in the medical degree. The faculty's new Associate Dean in Curriculum Development created the university's first Medical Education Unit (MEU) to manage the curriculum design and development of the revised medical degree, including embedding problem-based learning throughout the faculty as the core teaching and learning process.

To provide pedagogical expertise for the new problem-based learning curriculum, this unit was given a specific educational brief and was staffed by appointees from within medicine and from the wider university academic development community who had expertise in pedagogy and curriculum design and a focus on sound educational practice. Several years later this MEU provided the leadership and development work to establish the Master of Medical Education program.

In addition to curriculum development work, the unit was expected to provide a focus on medical education within the medical program, to pursue research and scholarship in medical education and to engage in staff development and program evaluation. The need for the Masters program grew from the new learning and teaching practices required in the revised medical degree and teachers' lack of experience with these new practices. Developed with the intention of encouraging participants to engage with new (for them) teaching and learning practices and to

start to think like educators as well as medical practitioners, the program was designed on Best Evidence Medical Education principles (Harden, Grant, Buckley & Hart, 1999). The program involved a practice-focussed approach where participants were encouraged to use the evidence-based theories, principles and literature of higher education and medical education to reflect and critically evaluate their teaching practices. It allowed participants to design and gain feedback on innovations in curriculum relevant to their workplaces and changes to their teaching practice based on their research into the educational literature (University of Sydney, 2009).

4.3 Program Graduates who Participated in this Study

This section describes some of the characteristics of the research participants, including occupation, motivation for undertaking the program, and role in education at the time of our interview. To preserve participants' anonymity and confidentiality I have replaced participants' names with pseudonyms and have de-identified their workplaces and medical specialties.

There were nine participants. Six were domestic participants ("Baden", "Nicole", "Paul", "Ruth", "Tara", and "William") and three were international participants ("Naveen", "Omera" and "Tracy"). This mirrored the ratio of domestic to international participants in the program overall. Two participants (Paul and Ruth) undertook the program in fully online study mode and the rest in face-to-face study mode. Table 4.3 details the participants' socio-demographic characteristics, including occupational roles at the time of interview.

72

Table 4.3

Characteristics	Total (n)
Gender	
Female	5
Male	4
Age Group	
20s	1
30s	4
40s	3
50s	1
Nationality	
Local (Australian) nationals	6
International participants	3
Study pattern	
Full time, on campus	3
Full time, online	1
Part time, on campus	4
Part time, online	1
Current main education role	
Academic medical educator	3
Clinical educator	5
Not teaching	1
Current main medical role	
Specialist	3
Trainee specialist	1
General practitioner	4
Medically qualified, not currently practising	1
Not medically qualified	1

Socio-Demographic Characteristics of Participants

Table 4.4.shows the time between our interview and the start and finish dates of their participation in the Masters program.

Participant			<u>Time I</u>	Elapsed		
	1 year	2 years	3 years	4 years	5 years	6 years
1. Baden			E ^a ,I ^b			T ^c
2. Nicole			E, I			Т
3. Tracy	Ι				Е	Т
4.William ^d		Ι	Е		Т	
5. Naveen	E		Ι	Т		
6. Ruth	Ι		Е	Т		
7. Omera	Ι	E	Т			
8. Paul	Ι	E	Т			
9. Tara	Е	Ι	Т			

Time Elapsed between Start/End of Program and Study Interview

Table 4.4

^a E= time spent as enrolled participant; ^b I=interval of time between finishing the program and interview; ^c T=time between starting the program and being interviewed; ^d William was the only participant to exit the program with a Graduate Certificate qualification. All other participants exited with a Masters qualification.

The demographics sheet (Appendix C) asked participants when they began and when they finished the program. When this was displayed (Table 4.4) a new indicator emerged—the total time (T) elapsed, that is, the time between the participant starting the program and the time of the interview. The few research studies that had studied impact on participants after graduation had recorded only the time interval (I) between the participant finishing the program and the time of the interview (Sethi, Schofield, Ajjawi, & McAleer, 2015). The participants in this study spent 1-5 years enrolled in the program. The interval between participants finishing the program and their interview ranged from 1-3 years (average 1.9 years). However the total time between starting the program and being interviewed was more than twice that interval, ranging from 3-6 years (average 4.4 years).

There were some commonalities in the circumstances and motivations participants expressed at the beginning of the program. Each participant's institutional and professional circumstances, however, were unique. The following profiles highlight the diversity in their practice environments.

4.4 The Academic Medical Educators: Omera, Naveen and Tara

Omera, Naveen and Tara were international participants. They were all universitybased academics teaching in their respective medical faculties. Omera and Naveen were in their 30s and Tara in her 20s. Omera and Naveen described similar reasons for beginning the program. Both citizens of developing nations, their home faculties encouraged them to do further study, gain a higher qualification and return with their new knowledge to work on their faculty's curriculum renewal initiatives, which had been mandated by a national change in education policy. Both were assisted to pursue the formal qualification through the award of an education scholarship funded by international development aid programs. They were keenly aware of the government's expectations of their university, the university's expectations of the faculty, and the faculty expectations of them, which influenced their expectations of the Masters program.

4.4.1 Omera

At the end of the program, Omera returned to her university where she continued working as a lecturer. She worked in the faculty's Medical Education Unit, on their assessment committee and engaged in revisions to the design of assessment in the faculty. At the time of the interview (2 years since beginning the program), she had sought further opportunities by electing to continue her studies, taking leave of the faculty to undertake a PhD in medical education. Omera was pursuing research that she believed could inform national government policy for accreditation of doctors in her specialty.

4.4.2 Naveen

Like Omera, Naveen returned to his university after the program to work on the new curriculum and continued working as a lecturer in the faculty of medicine. He became the secretary of the Medical Education Unit. He saw the unit as having clear overall responsibility for the medical curriculum "from planning to evaluating". His

work in the unit had been primarily focused on implementing the new competencybased medical curriculum. Naveen characterised his work as being well-aligned and supported locally and he identified multiple layers of support from colleagues around him, reinforced by local leadership. His work was further enabled by the informal communication network of professionals he developed with other Master-qualified medical educators in neighbouring universities with whom he felt he could discuss, exchange and test out ideas. He noted that the faculty Dean had hinted that a promotion would be forthcoming soon and Naveen was looking for a research project in medical education that would enable him to undertake a PhD.

4.4.3 Tara

Like Omera and Naveen, Tara worked in a medical education unit located in a medical faculty. Prior to beginning the program, Tara had worked in a curriculum support role for a registered training organisation in health. Her expectations of the program were tied closely to her own interests in furthering her knowledge and experience in education and exploring its potential as a career. During the program she had begun her work in the medical education unit, had moved into research work in medical education and, at the time of our interview, had also begun academic teaching in medical education. Unlike Omera and Naveen, however, she had little direct involvement with the medical curriculum, had only recently started teaching and had little experience with curriculum development at the time of our interview. Her work in medical education had mostly involved research and evaluation. For her, the contribution of the program had been that it enabled her to see medical education as a profession with its own distinctive theories and body of knowledge with which she could engage.

4.5 The Clinical Educators: Ruth, Nicole, Baden and William

When these four clinical educators began the program they were all working as medical specialists and as medical educators in different professional associations in their specialty—Ruth for registered vocational training organisations in her profession, Nicole in the teaching hospital's clinical education unit, Baden as an advanced specialist trainee in the teaching hospital and William as a qualified specialist at a different teaching hospital.

Ruth was in her 50s, Nicole and William were in their 40s and Baden was in his 30s. They each gave similar accounts of their motivations for beginning the program. They felt they wanted to improve their own teaching through a more informed and critical perspective that was grounded in education theory and research evidence.

Ruth said she began the program because, although she was confident about her professional clinical knowledge, she felt unsure about what she was doing in education. She had experienced ineffective education sessions (lectures and tutorials) and wanted to facilitate things in a better way. Nicole noted that she had made her decision to begin the program after working closely with a Master-qualified medical educator (who was not a clinician) at her hospital. Nicole felt that she had learnt a lot from that colleague; in particular, the person had encouraged her to think critically about education. She had become aware that most doctors had very little training in education or in supervision, even though they are required to do a lot of supervision. Baden and William expressed the same realisation. Nicole had the support (both collegial and financial) of the Dean, a professor in her discipline at the hospital. She saw the program as a way to formalise what she had learnt from her colleague, to do more critical thinking around education and to do independent study.

4.5.1 Ruth

Ruth began the program when she was working as a medical educator for a training organisation in her specialty. She worked part-time as a general practitioner and part-time as an educator. She remembers starting the program to improve education in medicine generally and, more specifically, to increase her own "capacity in education". She wanted to make her teaching better than some of the "ineffective" lectures, tutorials and workshops she remembered attending during her own training as a general practitioner.

After the program Ruth had continued to work part-time as a general practitioner. She had left her job in the training organisation after a change of leadership and organisational restructure. She had continued working in medical education and now held a leadership role as the Clinical Director of a rural clinical school. She was also the chair of the professional body for her specialty in the region. As the Clinical Director she coordinated approximately 60 medical students during their rotations at the clinical school to ensure they met the intended learning objectives and achieved the necessary clinical skills. She was not responsible for hands-on teaching but coordinated the teaching and ensured that the student experience was comprehensive. She had also undertaken several education research projects.

4.5.2 Nicole

Nicole had given up her clinical medicine responsibilities when she began the Masters program. At the time of our interview, she was still working part-time in the education coordination role, which she held at the start of the program, and had begun a second Masters degree in a field not directly related to medicine or education. She was continuing to work closely and harmoniously with her colleagues in the education unit and, together, they had introduced new formative assessment activities, undertaken several education research projects and presented papers at medical education conferences. She had been encouraged by her supervisor to prepare a promotion application for senior lecturer on the strength of her work in education. She also sat on several education committees.

4.5.3 Baden

Baden began the program during the advanced training phase, that is, after he had graduated as a doctor and was undertaking hospital-based training in his specialty¹. Before commencing the program he had been responsible for teaching medical students in the teaching hospital in which he was completing his training as a specialist. He spoke of feeling that something was lacking in his teaching. He felt he had insufficient experience, specifically in "the logistics or management of education". He was curious about whether a career path in medicine and education was possible and wondered what experiences such a path might bring.

At the time of the interview, which for Baden was five years after commencing the program, he was working as a specialist in the teaching hospital and supervising trainees. He had an education leadership role as the hospital's Director of Training.

1

The different phases of medical training are outlined in greater detail in Appendix G.

As the director, Baden had staff that helped to run the training programs, including recruitment, rostering and administration. He ran a lot of tutorials, handled complaints and conducted meetings to garner feedback from trainees about the progress of the training program. His education role had developed and expanded so that it represented 50% of his work and his medical role represented the other 50%. Baden also had an academic adjunct appointment as a senior lecturer and a further position managing training for the professional body in his specialty.

4.5.4 William

Like Baden and Paul, William was a medical specialist with teaching responsibilities. He was further along the medical specialty career track, having finished his specialist training some years before. He began the program when he was teaching medical students at the teaching hospital and working on education committees and had been asked by the faculty to develop a new postgraduate-level elective subject in his specialty. Because he was starting to focus more on the education aspects of his position, he felt he needed to know more about the "science and background" of education so he could "better understand medical education" and the "language of medical educators".

He completed the graduate certificate in medical education, the only participant in this study who elected not to do the entire Masters program. At the time of our interview, William, like Baden, had several roles. They both worked as clinical specialists in their hospital and as the clinical education coordinators for the trainees (known as advanced trainees) in their respective specialties. There were differences, however, in the scope and focus of their work. Baden had more clinical education leadership responsibilities than William. Baden held the title of Clinical Director, whereas William was the Clinical Coordinator in his specialty. Baden had more trainees (30) under his supervision than William (9). Whereas William was supervising and recruiting these trainees himself, Baden had staff that helped to run the training program and conduct recruitment, rostering and administration.

4.6 Participants with Reduced Responsibilities in Education: Tracy and Paul

Most participants had continued or increased their education responsibilities after the program. Tracy and Paul, however, had reduced their work in education and continued their work in their medical specialties. Tracy was in her 40s and Paul in his 30s.

4.6.1 Tracy

Tracy explained that she began the program because she had been teaching for some time and felt she needed a broader grounding in education. She felt she knew what she was doing in her teaching but that her teaching could be enhanced if it were better informed by theory and evidence. Her employer had been willing to subsidise some of the course fees, which made it more viable for her.

She had continued working as a private practice specialist. Her teaching responsibilities involved supervising trainee specialists in the practice and tutoring first year medical students for a large metropolitan university. She was doing less teaching now than when she started the program, at which time she had also been working as a medical educator for a professional association in her specialty and helping to develop a higher education diploma course with a university. When she started the course, she was teaching more and consulting less. At the time of the interview, she had purposefully reversed this balance so that her work as a general practitioner accounted for more of her time than teaching. She had discontinued her education work with the professional association in her specialty. She had not commenced any education research projects during the program, stating that she knew research was not one of her interests or strengths, so she had opted to do other elective subjects instead. She also noted that she had no interest in changing the medical curriculum or assessment of medical students. She had found balancing work and study difficult and was certain that she would never again enrol in a formal study program.

4.6.2 Paul

Paul explained that he began the program in the last year of his specialty training when he was teaching medical students. He began the program because he felt that he lacked a theoretical understanding of and training in education and he saw this as "a big hole" in his work. He also noted that the program came at an opportune time as he needed to complete a project as part of his specialty training and the Masters program would meet this requirement. He felt it had the potential to bolster his career in medicine, that it would be "useful" to "pick up" another qualification.

He had continued his specialty training and had begun training in a further subspecialty. This brought a change in his medical work and he moved from the teaching hospital to a community health service. He had not continued the education project he began in the program and his work gave him reduced opportunity for teaching and no opportunity for the development of curriculum.

Two participants (Sabina and Scott) were interviewed but they did not form part of this research. Sabina did not return the consent form. Scott's interview recording was of poor audio quality and he could not provide much detail on how he had made use of the program since graduation.

This information about participants is summarised at the end of this chapter in Table 4.5.

4.7 **Program Epilogue**

The Masters program was established through the faculty's major review of the medical curriculum. The faculty had begun a new review of the medical curriculum shortly before I commenced my research. My interviews with former participants took place before the recommendations and consequences of the review became known to program staff and participants. A few years later, following the implementation of the review's recommendations, the faculty dissolved the Masters program during a broad reorganisation of its curriculum support structures.

4.8 Summary

In this thesis I want to move to a new understanding of program impact, to see impact in terms of changing the conditions, which created the need for the program.

To problematise the idea of 'need for the program' I have looked at the interaction between the program, participants and participants' workplaces. This chapter has provided details of the conditions and drivers that brought the program into existence and the key concepts underlying its structure. It has also provided greater detail about what the participants saw as the need for the program and what motivated them to undertake it. It has also introduced some of the results of their participation in the program, a topic that is explored in more depth in subsequent chapters.

All participants started the program with broadly similar expectations of wanting to know more about education because they had an interest in education and had already been doing some work in teaching. Other than the two participants who had reduced their teaching role, all had pursued educational change within their own contexts. They all spoke of changing their own teaching and changing their approaches to student learning. Some had pursued education projects, some had pursued education research projects. They had different interpretations of their roles and differing perceptions of the scope and scale of the education changes they felt they could enact.

After completing the program, participants' perceptions of the purpose of the program changed. It also changed their perception of their own role in medical education.

Table 4.5

Participant	Characteristics		
The academic medical ed	ducators: Omera, Naveen and Tara		
Naveen	Male, 30s; International, full time, on-campus masters participant		
Main education role:	Medical lecturer (University A)		
Main medical role:	General practitioner		
Role changes:	Appointed as secretary of university medical education unit		
Omera	Female, 30s; International, full time, on-campus masters participant		
Main education role:	Medical lecturer (University K)		
Main medical role:	General practitioner		
Role changes:	On leave from university and medical roles and enrolled in a PhD in		
	medical education.		

Characteristics of Participants, Role at Time of Interview and Changes in Role since Graduation

Tara	Female, 20s; International, full time, on-campus masters participant
Main education role:	Associate lecturer in medical education (University B)
Main medical role:	Not medically qualified
Role changes:	Appointed as associate lecturer and commenced university teaching
	after the program
The clinical teachers: Ruth	n, Nicole, Baden and William
Ruth	Female, 50s; Local, full time, online masters participant
Main education role:	Clinical school director of a teaching hospital (Hospital L). Education
	chair and assessor for a professional association in the specialty.
Main medical role:	General practitioner
Role changes:	Began the director position and ended posting as medical educator for a
	post in a registered training organisation in her specialty
Nicole	Female, 40s; Local, part time, on-campus masters participant
Main education role:	Hospital education unit coordinator (Hospital C). Medical lecturer
	(University B)
Main medical role:	None. Qualified specialist, not currently working in medicine
Role changes:	Same education role as before the program with increased work in
	education committees, education projects and education research,
	preparing for promotion to senior lecturer.
Baden	Male, 30s; Australian, part-time, on-campus masters participant;
Main education role:	Director of training (Hospital B); Senior lecturer (University E)
Main medical role:	Specialist (Hospital B)
Role changes:	Appointed as Director of Training
William	Male, 40s; Australian, part time, on-campus graduate certificate
	participant;
Main education role:	Adjunct associate professor appointment (University B)
Main medical role:	Specialist (Hospital A)
Role changes:	Promotion to Associate Professor
Participants with reduced	education responsibilities: Tracy and Paul
Tracy	Female, 40s; Local, part time, on-campus masters participant
Main education role:	Medical student tutor (University E) and supervisor of medical trainees
	in the practice
Main medical role:	General practitioner
Role changes:	Reduced teaching responsibilities, ended posting as medical educator

Paul	Male, 30s; Local, part time, online masters participant
Main education role:	Infrequent facilitation of short training courses
Main medical role:	Trainee specialist
Role changes:	Reduced teaching responsibilities, expiration of hospital contract
	position, moved to community health service

Chapters 5, 6 and 7 present the findings from the participant interviews, organised around three central concerns. Chapter 5 focuses on the changes participants identified in their interactions with students. Chapter 6 focuses on changes in participants' interactions with colleagues, and chapter 7 explores the more abstract central concern of participants' changed interaction with education as a profession. Each chapter contains thematically grouped interpretive passages interspersed with illustrative quotes from participants. These central concerns and themes were developed through iterations of interpretive writing and thematic grouping undertaken during stage 4 of the hermeneutic research process.

Chapter 5

Interactions with Students

When participants spoke of how they had used concepts from the program in their work, a central concern was that of the changes that had occurred in their understandings of and interactions with their students. Several participants described how their interactions with students had changed after the program and elucidated the benefits and challenges that went with those changes.

In describing their reasons for commencing the program, all the participants remembered wanting a better understanding of the theory and principles of education to help them improve their own teaching. Some years after they had finished the program, it was the key concept of students' approaches to learning that they all spontaneously identified when asked to talk about what, if anything, they remembered from the program.

Participants spoke of how, after the program, they had developed a new awareness of the pre-existing, persistent and accepted views of learning and teaching in their workplaces. The program had helped them to realise that those approaches represented a traditional, taken-for-granted way of teaching from which they now sought to separate themselves. They were able to identify shortcomings in their own earlier beliefs about and approaches to teaching. The program had helped them to reflect on how teaching had been enacted in their own workplaces and they spoke of the insights they had gained as they sought to move towards more learner-focused approaches to teaching.

In particular, they highlighted the need to change what they realised were taken-forgranted approaches to teaching which, post-program, they felt were not conducive to learning. Analysis of the interview texts identified four main themes that clustered around these complex interactions. These were: recognising fears and uncertainties; discerning and rethinking dominant approaches to teaching; consciously creating more active learning environments to enhance their students' learning; and limited changes in interactions with students. Each of these themes is explored in more detail below.

5.1 **Recognising Uncertainties and Fear**

Participants, to varying degrees, spoke of how the program had prompted them to analyse their teaching and learning beliefs and experiences. One impact of the program for Naveen, Omera and Tracy was to help them recognise where they lacked the pedagogical knowledge to address problems with their students' learning. Naveen, three years after finishing the program, described the sense of fear and confusion that had underlain his earlier practice. Prior to the Masters program, he recalled, he was reticent about identifying as a teacher. He portrayed himself first as a doctor, a general practitioner (GP), even though he had a full-time posting as a university lecturer in the medical faculty:

It was like I was lost in the jungle. Before [the program] I didn't have background at all in teaching and learning. I'm a GP. I didn't know how to teach students in a good way.

Naveen worked as a teacher with a sense of dread that his "students would have a problem" with the subject and he had no idea what he would do to help them. He felt isolated and without a coping strategy if students did not pass his class.

For some participants, the only experience they had of teaching was having been taught. This did not equip them to deal with problems in student learning as they arose. Omera conveyed a similar sense of anxiety, which she situated in a sense of responsibility borne out of once having been a medical student in the faculty where she was now teaching. This created feelings of empathy with her students and a sense that she should, in some way, be able to improve things for them:

Especially for me as a junior lecturer, I want to make some changes for the faculty. I was one of their graduates so I have some experience as a student at the faculty. I know everything about the system . . . learning about medical education made me know I should change this. I should change this.

At the same time she also felt that students were struggling with her subject, which they found dull and difficult:

Many students feel bored when studying [subject] and it is a kind of subject that not many students like. I think that [subject] is really important for students, especially the medical students because—for me [subject] is like a foundation for learning for the students. So when our students are not feeling comfortable and not interested in learning [subject]

area], it's not good for them because they will not learn it better or in a good way. They will not have a good foundation for the next step of learning in medicine.

She recalled that, at the start of the program, she was at a loss as to what she could do to improve the situation in her classes since she felt that she had faithfully reproduced the style and behaviours of other, more experienced lecturers in the department. This tension between her felt need to improve things for the students and the realisation that they were bored in her classes exacerbated her sense of anxiety.

In attempting to improve their teaching, participants had drawn heavily on their own experiences as students. When students' behaviour diverged from their recollections of being a student, however, they were uncertain how to respond to problems affecting learning. Tracy, one year after the program, reflected on an issue with her students which, prior to the Masters program, she had seen as unfathomable. She recalled feeling that her students were strategically focused on single and relatively superficial aspects of patient care and she was uncertain of what to do to address this:

One of the things that I noticed a lot with the students that you have in first year, when you observe them on the wards taking a history and you're discussing it afterwards, they will say to you 'I didn't think I needed to know anything more about that'. I'm always totally fascinated by that statement—where does that come from? I don't ever remember experiencing that as a medical student. You know so little about medicine at that phase of your life, how could you possibly know what wasn't relevant?

Tracy noted that, before the program, she had thought of this as a deficit in the students who, when taking patient histories on ward rounds, tried to "contain" their medical knowledge, limiting it to what they thought they needed to know to get their work done and leave as quickly as possible. She recalled being frustrated that the students could not think more deeply about the "holistic care" of their patients.

After the program, Naveen, Omera and Tracy reflected on how difficult it had been to know why students were having problems with learning in their specialties or what to do about it. The program was an avenue for them to explore their questions about student learning. This helped Naveen to leave behind his fear about his teaching. It helped Omera to find ways to improve student interest and engagement in her specialty and Tracy to identify her students' approaches to learning in her specialty.

5.2 Discerning and Rethinking Dominant Approaches to Teaching

Participants spoke of how the program prompted them to discern, criticise and rethink their teaching practices. Omera and Ruth spoke of becoming aware of their own earlier orientation towards didactic teaching methods. They recalled how, prior to the program, they had unthinkingly adopted an expert-led, didactic, approach to teaching.

Omera remembered teaching her specialty in the way she had been taught, via facts from the textbook—an approach in which students were seen as the passive receivers of knowledge. Both students and teachers were reliant on the exam to demonstrate whether the facts had been accurately absorbed and replicated. She portrayed her earlier teaching methods as a cycle of dull, repetitive, unthinking actions. She now saw that, as a teacher, she had been a 'talking head' in front of the class, lacking engagement with the students. Her sole focus was lecturing to the students and examining them on the content of the lectures. Kember (2007) called this an examination orientation to teaching and learning and linked it to poor learning outcomes for students.

Like Omera, Ruth's earlier beliefs about teaching surfaced through the program. One year after finishing the program, Ruth revisited her memories of teaching prior to the program and characterised her earlier methods as traditional and teacher-oriented:

I was traditional. I thought you had to learn there and then, in the present with the teacher teaching you.

Through reflection, both Omera and Ruth had discerned their own prior beliefs about teaching and come to see how those beliefs were consistent with the teaching practices in their departments and with their own histories as students.

Moving beyond the horizon of individual teaching methods and teaching beliefs, Omera's reflections also hinted that her department's customary view of the teacher's role was about following set paths—teachers reproduced established content and perpetuated the established approach to teaching. Omera's reflections provided insight into how the program overall had made her more critically aware of conventional teaching practices in her department and spurred her to want to change her own approach to teaching:

It's not like before where they [teachers] just give the lecture and then set up the exam and then write the exam. Now, I think that I'm not only a teacher. I am not just a chair in front of the class. [I think about] how to include students in learning in small groups and how to be a role model for them.

Nicole came to a similar conclusion. Her reflections, however, were prompted by an examination of the teaching beliefs and methods of other teachers in her workplace. She identified a specific scholarship of learning and teaching activity in the Masters program that had sparked her insights. She recalled having elected to interview clinicians in her teaching hospital about their experiences of being a teacher. As a result of those interviews, Nicole became aware of her clinical colleagues' predominantly transmission-focused conceptions of teaching:

I remember being quite struck about how for almost all of them . . . it was all about imparting their knowledge to other people. [There was] very little notion that different learners might be at different places with their knowledge, and that there might be requirements from their learning institution as to what they should learn or anything like that. It was all about the learner as something to be filled with their knowledge.

Nicole, like Omera, expressed a critical perspective on the dominant conceptions of teaching and learning in her workplace by juxtaposing it with her own focus on the experiences of students. Nicole conjectured that her colleagues had largely overlooked the critical role of the student in learning by being focused on teaching as transmitting information and content.

In the Prosser and Trigwell (2006) model of learning and teaching, individuals' approaches to teaching and learning are connected to their own perceptions of their context, and perceptions of context are in turn related to both the characteristics of the student or teacher and the course and departmental learning context. Through reflection, Omera, Ruth and Nicole had separated their approaches and conceptions of learning and teaching from the dominant views in their workplaces. They had become aware of the customary view, evaluated and criticised it, and articulated a difference between that view and their own.

The hermeneutic cycle encourages a zooming in and zooming out of the phenomenon to clarify the conditions of understanding. Zooming in to focus on the individual's beliefs highlighted how the individual participant reflected on teaching and, through the program, began to discern and criticise the traditional teacher-focused approaches to teaching. Zooming out highlighted how the individual also recognised that an approach to teaching is more than an individual phenomenon: it is a shared practice, part of what Stigler and Hiebert (1998) have called a cultural script for teaching. The teacher-focused approach was a widely shared practice, learnt implicitly through observation of other teachers in the department and participation as a student in the teacher-focused classroom.

5.3 Creating Active Learning Opportunities

Participants acknowledged particular pre-program fears and uncertainties in their teaching and a tendency to be teacher-focused. They also spoke of how, through the program, they had become interested in different ways to enhance student learning. They reported that participation in the program led to a conscious unfreezing of their earlier perceptions and practice of teaching as they found new ways to learn from and interact with their students, and as they helped their students to participate more actively in their own learning.

Ruth constructed an alternative to the usual ways in which students had been taught in the hospital. She noted that she had "used role-plays before" the program, but post-program she was more aware of the value of active learning. The combination of learning "about active learning" in the program and hearing her students in the hospital saying "oh, you know, you taught us that but we didn't really know we had to learn it" had stimulated her to re-evaluate how students had been participating in learning. As part of her new-found interest in active learning she introduced new peer-assisted learning activities into her teaching:

I wanted them to be more actively involved and for the learning to be more real. So that if they're actually in the situation and having to handle it, then they tend to learn more.

These peer-assisted learning interactions, she reported, had an embedded element in the conditions for learning in the hospital, at least among her own students. They involved students working in peer groups to provide feedback to each other prior to more formal assessment activities. Ruth valued the active engagement afforded by the peer interaction, and the students saw value in the feedback incorporated in the learning activity:

Students like it. They relate much better to their peers. They seem to be able to ask more questions, to interact, to be more involved.

Ruth observed that student participation and interaction has improved as a result. Moreover, by paying greater attention to how students learned—"the actual *way* of learning", as she put it—she identified other situations where there was a lack of salience in the conditions for student learning which she could act to change. For example, medical students' were meant to be doing "a special term in the final year to make sure they are work-ready". Ruth realised that students were not seeing this term as "special", since their participation was still in the traditional lecture/tutorial/ward round format. She observed that students "weren't taking it in", it wasn't "real" to them and they didn't feel the necessary "responsibility" or the "anxiety". She replaced the traditional format with more active scenario-based activities in a simulation laboratory in the hospital. Students were rotated through different stations, sometimes with simulation mannequins, sometimes with volunteer patients or actors, to work through common scenarios they would need to deal with when they found themselves on call:

We'll rotate them through the different scenarios and have somebody observing them and giving feedback or we have them videoed so that they can watch themselves and give themselves feedback. The students have to handle the scenarios and work through them rather than just seeing or hearing what somebody else does. They're actually doing it.

Ruth spoke of listening to and learning from the students and acting to change the conditions for learning in the hospital. She was enthusiastic about how these changes had also helped to engage and motivate students to become more active participants in their own learning.

Omera reported that, after the program, she had moved away from the familiar practice of transmission-mode teaching and had examined the connection between being a teacher and being a subject expert. She reflected on the authoritarian nature of the transmission-mode teacher in her department—teacher as head of class, controller of textbook content delivery and overseer of examinations—and articulated a desire to adopt a different identity as a teacher. She spoke of her postprogram work as focusing on moving away from "purely teaching" to becoming a "good role model" for her students:

Students need some motivation, someone who can encourage them to learn. I can be a good motivator. If they perceive that the subject is important for them then they see the advantage of learning.

Omera had adopted the concept of "motivation" from the program, using it as a touchstone in the projection of herself as a teacher and mentor. Post-program she had worked to translate the concept of motivation and mentorship into her own teaching environment. Motivating students was something that she felt she could do by enhancing the relevance of the subject to the real world of her medical students. She had moved away from a concentration on lectures as the delivery of "textbook" facts and content which her departmental colleagues persisted in and had instead focused on how the subject content was important to the health of patients whom students were likely to encounter in the clinical context:

Now I realise the way they [colleagues] structured their lectures was not quite so interesting for students. Now I think that using cases and giving examples of clinical cases is more interesting for students.

She also spoke of motivation as something that she had sought to engender in students via the redesign of her lectures, to which she had added discussion activities and probe questions to guide students' case discussions:

Before there were no questions after the lecture. Now with this new style of lecture students are asking more and more questions, especially when they have had their own experiences from clinical or a neighbourhood or family experience.

Omera reported that she had shifted her approach to teaching and that the increase in students' curiosity and questioning in her class indicated that this shift had a positive

influence on students and their motivation to learn. In the classroom, she had begun to shift control of learning from the teacher with a textbook to the student with realworld cases to examine with peers. She had moved away from focusing on teaching as providing facts to students towards motivating students by contextualising the subject matter and having students contextualise and question the subject matter.

Omera's changing approach to her teaching is consistent with Prosser and Trigwell's (2006) modelling of a teacher's understanding of teaching and learning as being related to their perceptions and approaches to teaching. Through her reflexive consideration of the common transmission mode of teaching in her department, prompted by the program, she had made changes in her own teaching. She had worked to engender student motivation for learning with a more active approach to student learning and to disrupt the traditional view of lectures as a passive information transmission activity of teachers as subject experts controlling learning.

Omera was an international student who finished the program, returned home to teach for a semester, then took leave to commence a PhD in medical education. She had not as much time as Ruth, for example, to repeat and improve the changes she had introduced with her students or plan and extend her ideas beyond a semester or two. When Omera spoke of the impact she felt the program had on her teaching, there was certainly a sense of her having just begun to introduce changes into her teaching. Although the program had an impact on how she practised teaching and, to some extent, on how her students were practising learning, this did not extend to an impact on the learning and teaching practices of her disciplinary colleagues or to the senior leadership of her department or Faculty, as the Canberra model (McCormack et al., 2009) suggests it could do. From a practice theory perspective, the changes Omera outlined were a change in individual activities, a change in her lectures that had not become a change in the collective educational practices of the department (Schatzki, 2011). The practice of the traditional lecture and transmission-mode teaching continued as a phenomenon in the department.

Naveen, like Omera, spoke of consciously moving away from transmission-mode teaching in his classes. Learning about the concept of "active learning" in the Masters program had resonated with how he had wanted students to learn his specialty. He recalled that his own active engagement in group discussions as a

student in the Masters program had been effective in supporting his learning. Collaborating with his fellow participants in the program had helped him to develop his knowledge and judgment though the feedback he received from other participants as he "checked and rechecked" his understanding with them. Further, as an international participant, he felt the group interactions in the program had helped him settle in and succeed in an unfamiliar environment.

Post-program, Naveen changed the learning activities in classes to become more discussion-based as he valued the opportunity for his students to give voice to and work through their ideas:

I've encouraged the students to become active. I'll give them the topic before class, then in the class I don't have to teach everything. I create small discussion groups and when students have reached a conclusion they speak in front of the class. Or I ask them to criticise an article and they'll discuss and criticise it in their groups.

Naveen also reflected on how his feedback to and from his students had changed post-program. He worked in a department where teachers commonly verbally chastised and "punished" students for answering questions incorrectly in class. Swanwick (2008) characterises this type of "teaching through humiliation" (p. 339), which is supposed to motivate students, as one of the three historically common teaching approaches in medicine. Naveen recalled that, in the program, receiving constructive feedback from teachers had provided him with greater motivation to learn and he reasoned that it had a better effect than punishing students for incorrect answers with "harsh feedback". He saw feedback as a way to help students improve their skills and knowledge and not as "punishment" for poor performance or mistakes, as his colleagues did. Post-program he had changed how he used feedback with his students:

I think you have to give the feedback in constructive ways. You can't say, 'oh you are stupid' or 'you are an idiot' or something like that. I think, no, it's not constructive feedback actually . . . Now I always give reasons about why they are right or wrong . . . I explain this is how to improve your skill, your knowledge. why I say this, why I say this, why I say you are wrong and why I say you are right.

Through the program, student feedback became a more salient feature of Naveen's experiences of learning. He had recently created a new annual student evaluation

questionnaire and had begun to implement the questionnaire in two of his subjects. Naveen reflected that through the program he had come to see that drawing feedback *from* students would help him improve his own classes and would help the faculty identify the strengths and weaknesses of the medical curriculum from the students' perspective:

Before [the program] I thought evaluation was not really important. But right now, I think evaluation is something to keep going to improve or to grow our teaching and learning processes. So I think we have to evaluate our students so we know what are our weakness and what's our strengths.

Previously, enhancing the quality of learning via feedback from formal student evaluations had been an infrequent event in his faculty. Student evaluations of teaching had traditionally been conducted "just once or twice in the student's lifetime". Naveen's increasing use of detailed constructive feedback and his attempts to seek student input into the curriculum development process through student evaluations demonstrated his increasing focus on the learner.

Nicole reflected on how, post-program, the concept of "learner centredness" had moved "much more to the forefront" of her actions and educational beliefs. Nicole translated the theoretical concept of "learner centredness" from the program to a more specific meaning in her situation. She contextualised learner centredness as a phenomenon in which she and the students became much more aware of situating new knowledge within the "structure" of students' prior knowledge and within the "structure" of the overall curriculum:

This whole learner centredness thing, it's not about me dumping everything that I know or I think you should know on the learner. It's about what the learner needs to know in terms of where they are at -what they're interested in, what they think they should know and what the learning institution thinks they should know. Now I am a lot more conscious of that structure around what I'm teaching.

Nicole spoke of the structural barriers to learning that existed in the curriculum and how, post-program, she had come to identify a role for herself in helping students overcome those impediments to learning by focusing more on working to integrate their existing understanding with new knowledge. Nicole ran bedside tutorials with second year medical students in the teaching hospital. Post-program, she saw her role as helping students to contextualise what they had learned:

Knowing about their prior learning; being conscious that they need to be building on it, is all being reinforced by doing the program.

She had changed her approach to teaching to align more with the new conception of her role, which had changed from that of a transmission-focused teacher and content expert.

Nicole noted that, post-program, she was "more careful to establish where students' learning was at". She saw that the topics and cases in the students' university tutorials often did not line up neatly with the problem-based learning (PBL) cases and topics the university expected students would study in the clinical tutorials in the teaching hospital. She observed that this would be a significant impediment to students' learning, so she changed her teaching sessions. She began reviewing the related problem-based case studies students would have completed in their university tutorials and used questions to prompt students' prior learning on those PBL cases at the bedside. Contextualising learning in this way had a positive influence on her interactions with students:

Students' eyes go wide when they realise I actually know what they've been learning.

She saw her role as helping students to contextualise what they learned by calling on their prior learning to reinforce their new knowledge, structuring what she was teaching and helping students build on what they already knew. She allowed students "more time to think about questions" and used those questions to improve the case discussions among peers so that students felt "allowed to present their thoughts", rather than having the expert teacher dominate the discussion as before.

As the participants spoke of refining and changing how they interacted with their own students, they expressed a sense of freedom to make changes based on what they had learned in the program and what they learned from their own students as a result. They spoke of making changes with what seemed to be a high degree of trust and autonomy between themselves and students. They spoke with a sense of striving to improve learning through changing students' participation in their learning and improving the conditions for this participation. Their talk emphasised a concern for student learning, to listening to students and to student learning as something that was experiential and social, occurring through interaction with peers and moderated by feedback.

In the main, participants' experiences of changing their interactions with students were consistent with Prosser and Trigwell's (2006) model of learning and teaching. As participants' knowledge and experiences of teaching changed, their perceptions and approaches to teaching and learning also began to shift. They reflected on takenfor-granted transmission-mode approaches to teaching in their history as students or teachers within their disciplinary and departmental cultures. Through the program, they sought to focus more on ways to enhance student learning and in their teaching they sought to make learning more relevant, participatory and collaborative for students. Their styles of student and classroom management changed to become less custodial.

These changes were evident in participants' reflections on their individual actions. In many senses, the changes were confined to the individual participant and her or his students. Participants did not, for instance, indicate how (or whether) the changes they had introduced in their teaching had any impact on colleagues or senior staff in the university, which the Canberra (McCormack et al., 2009) model identifies as a possibility. Participants' accounts suggested that the traditional transmission-focused methods of teaching continued to exist in their departments, but that their interactions with students were separate and different. Schatzki (2011) argues that this is not a change in practice; it is an event or an activity that occurs while the existing teaching practice continues as the collectively mediated way of teaching in the department or discipline. This emphasises the meso level view of practice, where the analysis of practices is focused on participants' departments and workgroups.

It can also, however, be understood as a change in practice at the micro level in that the more active and student-centred approaches engaged students as practitioners (to some degree) in their own education. Therefore, while practice might not have changed among participants' traditional academic colleagues, it had, in a sense, broadened who their colleagues were. Schatzki allows practices to exist on different levels and within different groups. This can be used to broaden the view of pedagogy as an arrangement of texts, actions, understandings and purposes for acting and interacting (Thompson, 2012). Participants in this instance may have been involved in changes in practice with a group who are not traditionally considered to be part of the department or discipline but whose practices are, at one level, crucial to the conduct of an educational enterprise—that is, the students.

It is important that individual participants in this study experienced a new sense of the salience (Lave, 1999) of their students' participation in their own learning, particularly as more student-focused approaches to teaching are related to more productive approaches to learning in students (Gibbs & Coffey, 2004). Participants also noted, however, that even though their approaches may have changed, other teachers in their workplaces continued to perpetuate traditional transmission-focused teaching practices. As Biggs (2001) emphasises, improving the quality of learning and teaching is best accomplished not by believing that individual teachers need to be improved or 'fixed' but by aligning the various practices and systems in the institution towards the goal of high quality student learning.

5.4 Limited Changes in Interactions with Students

Not every participant reported transformative shifts in their interactions with students. Tracy described instances of reflecting on and changing how she interacted with students, but she felt that, overall, much of what she had learned in the program was now disconnected from her daily work. Although the program was for her "useful" and "interesting", she felt that she had not incorporated a great amount of what she had learned into her daily practices. She had wanted to improve students' clinical reasoning but, post-program, did not feel that her needs had been adequately addressed:

It is often the clinical reasoning that goes wonky with students. So to me, it's a key issue when you've got a trainee who is struggling. I was looking for a whole range of insights, tips and strategies, about how to address that. I just didn't get it.

She noted that the concept of deep and surface approaches to learning, which she first heard of in the program, resonated with her experience of students. For her these concepts were a "helpful terminology" to explain the dissonance she felt between the level of understanding she sought from students and the more "superficial" level they tended to aim for. She felt this helped her to recognise that the problem did not lie in some deficiency in the student for which the student should be blamed; rather, it resulted from an approach to learning that could be attributed to a number of factors both in the characteristics of the students and in the contexts in which they learned. Although she felt that she understood the situation better, she recognised that she had not yet acted to change it. As Tracy continued the program her working conditions changed and she began to teach less and consult more than she had before². She observed that the initial relevance of the program had become more distant for her as time went on.

Like Tracy, Paul was teaching less by the end of the program than when he had started. He had left his role in the teaching hospital and, post-program, was involved only in teaching the occasional short course. He felt that the highly structured format of those short courses left very little scope to diverge from the "set way" of teaching, as he called it. Although, like Tracy, he still recalled with appreciation concepts from the program such as deep and surface approaches to learning and active learning, he felt these were theoretical concepts which were not relevant to his current limited teaching role.

Baden too had moved on from his main teaching role post-program and had less hands-on teaching work. Reflecting his work as a Director of Training in the teaching hospital, Baden spoke more of his leadership and supervisory work and his interactions with colleagues and the profession rather than with students.

William had continued to teach medical students and trainees, as he had before the program, but he did not describe the same engagement with changing his interactions with his students as the other participants did. William stated that he was a more organised teacher post-program because he now documented the learning objectives for each of his bedside tutorials in the teaching hospital. He reflected that previously the sessions were more unplanned and driven by how many patients he could get his students to see in the available time. Although he had "changed the learning

² Of all the participants, Tracy was the one who was enrolled in the program for the longest time. She noted that in the first year of her enrolment, she left her main role in medical education and she had a diminished sense of urgency to complete the program.

objectives to being about clinical reasoning, rather than just about learning facts", he felt student learning had not changed. He believed that the students were still unfamiliar with the foundational knowledge required to really engage with clinical reasoning to the level that he had hoped for when writing the objectives and felt that improving their foundational knowledge was not his responsibility.

After the program all participants spoke of understanding the theory of students' approaches to learning. Not all of them however, spoke of employing this and other ideas from the program in their direct interactions with students at the bedside or in the classroom. Four participants (Naveen, Omera, Nicole and Ruth) actively pursued changes in student learning in the areas where they felt they had some control over their curriculum and teaching environments. For others (Tracy, William, Paul and Baden), the theme of change in interactions with students was less apparent.

In some instances this was due to external factors; Baden and Paul, for instance, had moved away from positions in direct contact with students. In other cases it seemed to be more a matter of participants' understandings and perceptions. William, for example, understood and used the concept of students' approaches to learning as a descriptive framework. He employed the concept to explain students' limited learning, but did not go on to use the concept as a path to improve learning. His perception of the context was that the problem lay in students' lack of prerequisite knowledge and he felt it was not his responsibility to address this. Tracy was similarly appreciative of the way the concepts from the program aided her sensemaking around her experience of how students approached particular learning situations, but these theories did not, in the main, transform her pedagogical interactions with her students.

The inability or unwillingness of some participants to pursue change in their teaching highlights that knowing what good teaching looks like is sometimes not enough. The program may change participants' conceptions of teaching and learning and provide them with new theoretical constructs which they can use to make sense of their experiences, but these new conceptions and new sense-making approaches will rarely be able to be employed directly and without constraint. These conceptions must be used within the participants' existing contexts and will be influenced by other factors—for example, a change of job or feelings of responsibility and/or control (or absence thereof) over certain aspects of students' learning.

5.5 Summary

Participants identified instances where they came to question particular, taken-forgranted aspects of teaching in their own workplaces. They spoke in detail about how their actions as teachers had changed as they began to question how students were learning in their specific settings. Their focus was predominantly on the established role of teacher as an instructor working in pre-defined teaching settings such as tutorials, lectures, at the bedside and in other clinical environments but, increasingly, they saw the teacher's role as being focused on students' learning rather than on content. Some participants provided examples of changes they had introduced in their approach to working with their own students.

Participants recalled a variety of ways in which the program had helped them to change how they interacted with students. By focusing more on the students' experience than they had previously, they worked on different ways to help and motivate students to learn. They spoke of developing new ways to help students see the relevance and workplace importance of disciplinary concepts. They also highlighted their own growing sense that it was important to help their students to work together to become more active participants in their own learning and supporting one another to learn, creating a change in the practices of participants and their students even in situations where there were no perceptible changes to institutional teaching practices. Participants also began to see the importance of feedback and evaluation as offering an opportunity for further dialogue with students for the purposes of improving learning.

Biggs (2001) identifies transformation as an important element of the quality of teaching and learning in universities:

Quality teaching transforms students' perceptions of their world, and the way they go about applying their knowledge to real world problems; it also transforms teachers' conceptions of their role as teacher, and the culture of the institution itself. (p. 222)

Participants noted positive reactions to these changes from students, who were now more active and positive in the classrooms and other learning environments. They also noted a change in their understanding of their own role and their sense of purpose as a teacher, though this change was greater for some than for others.

Understanding UTD program impact as changing participants' perceptions of and approaches to teaching (Prosser & Trigwell, 2006) gives the most direct insight into the findings presented in this chapter. The longer-term contextual impact on interactions with students was primarily an individual phenomenon, internal to the participants. The experiences participants reported were focused around their own changed perspective on learning and how this changed perspective had led them to make specific changes in their behaviours in an attempt to improve their own teaching and their students' learning.

For most participants, this aligned with their original motivation for enrolling in the program. They often described the changed actions and perspectives in the language of the program, speaking of improving student learning rather than better teaching. They also talked in terms of encouraging students to become active learners, adopt deep approaches to their studies and construct new understandings. These were all concepts they drew from their time in the program. This vocabulary is also the one employed by Prosser (Prosser & Trigwell, 2006; Prosser et al. 1996) to describe the experiences participants undergo in these programs, the teaching and learning behaviours modelled for them throughout the programs and the perceptions and approaches they are expected to adopt by the end of the program.

This common vocabulary enhances the ability of the Prosser and Trigwell (2006) model to explain the experiences the participants were describing at this point in their interviews. Furthermore, the views and experiences reported by the participants up to three years after graduating from the program mirror those of recent graduates who have been surveyed and interviewed in a number of evaluations based on the Prosser and Trigwell (2006) model. This suggests a degree of longevity and persistence of participants' new conceptions, even in environments not immediately welcoming of them.

Hermeneutic analysis of the texts produced by the participants' interviews at this point reinforces the Prosser and Trigwell's model view of the impact of the programs at an internal, individual level. In describing changes to their own practices, however, some participants also reported a sense of being out of step with what was going on around them as their colleagues and work organisations continued with more traditional teaching practices. An iterative process of focusing (zooming) in on these issues produced the interview texts that form the basis of the next two chapters.

This chapter has analysed how participants spoke about their experiences of recognising and changing their prior approaches to teaching, with their own students. In Chapter 6, I focus on how they approached instances where they needed to work with colleagues to change such situations and in Chapter 7 I examine how they worked across their organisation and profession. In the following chapters I continue to draw on the Prosser and Trigwell (2006) model to explain some of what the participants discuss, but I will increasingly draw on models based in practice theory to explain what is happening as participants navigate their new conceptions through the cultures of their organisations and negotiate for change with those around them.

Chapter 6

Interactions with Colleagues

In participants' talk about the interplay between the program and their education work, I identified 'negotiated collective collegial interactions and experiences' as a central concern. Participants reported having identified certain collective collegial and organisational educational practices that they wished to change. Some attempts to advocate changes to colleagues and committees were successful, but other changes were either not adopted or had stalled. This process of advocating for change highlighted the socially negotiated nature of participants' education work.

Participants' understanding of the program's impact on their interactions with colleagues clustered around four main themes: participants' new sense of empowerment and connection in working with colleagues individually; new perspectives on working collectively with colleagues in education committees; conflict, resistance and inertia in interactions with colleagues; and conflict, resistance and inertia in interactions with colleagues.

The previous chapter noted that there was variability in participants' willingness and ability to effect change in their own teaching and interactions with students. There was similar variability in their willingness, ability and opportunities to negotiate change within their organisations. Participants identified a number of individual and organisational factors that influenced the success or otherwise of their interactions with colleagues. In the following discussion, I examine participants' experiences of both empowerment and conflict through different lenses on university teacher development: the Prosser and Trigwell model (2006), the Kirkpatrick model (Kirkpatrick & Kirkpatrick 2014) , the Canberra model (McCormack et al., 2009) and social practice theory (Lave, 1996; Schatzki et al., 2001).

6.1 Empowered Connectivity with Colleagues

The Canberra model (McCormack et al., 2009) identifies acting as a source of curriculum advice and support to colleagues as a dimension of academic citizenship.

In a further sub-classification, Macfarlane (2007) speaks of collegial service. In the hermeneutic phase of becoming oriented to the phenomenon under investigation, this literature had prepared me to hear such topics raised by participants but it provided little detail about how the process might operate on the ground. Macfarlane identified collegial service as an important aspect of education work in academia and McCormack proposed that a significant proportion of UTD program impact will occur in this dimension, but neither author described how this would be understood from the participant's perspective.

When speaking of providing curriculum advice to colleagues, participants discussed their perceptions of their changed interactions with those colleagues. They often expressed this as a changing sense of their own value—a growing sense of confidence in their knowledge of pedagogy and ability to improve pedagogies through scholarly inquiry. Participants noted that, as a result of the program, they were more likely to speak with colleagues about ideas for improving learning and teaching. They felt their work with colleagues was now more informed by evidence drawn from their knowledge of pedagogy, research or educational scholarship.

For some, this heralded the development of a new working environment, one in which they more readily volunteered advice or were more frequently asked for advice by colleagues. Their colleagues did not always accept or act on their advice, but participants felt their conversations and interactions with colleagues were different—they occurred more often than previously, were more productive and more informed by pedagogy.

Ruth talked about how the program had helped to alleviate her feelings of isolation in her part-time education role in the rural teaching hospital. Although she held a coordination leadership role in clinical education at the hospital, opportunities to engage in teaching-related conversations with colleagues had been limited. Postprogram, she felt that her conversations with colleagues had begun to change. Now clinical specialists in the hospital began to approach her for advice about their teaching and their students.

I've been surprised actually. A couple of the clinicians have actually come to me and said 'look I've got this problem with a student; how do you think we could...'

This happened as a result of Ruth's growing assurance and a change in the value she placed on educational ideas and expertise, a change which was to some extent being communicated to and shared with her colleagues:

It's given me the authority to actually be able to talk to other clinicians. Particularly as a general practitioner, talking to a specialist or a consultant physician, having the education degree has given me that authority to be able to say to them 'think about doing it like this', whereas I wouldn't have done that [previously].

As Gibbs (2010) has pointed out, a departmental culture in which teachers regularly speak to one another about improving teaching is important to the quality of learning and teaching. In Ruth's context, sharing ideas with colleagues was an impact of the program that was likely to improve the quality of learning and teaching. She identified one of the barriers to the formation of such a culture as the lack of interdisciplinary connectivity stemming from a historical division between medical specialties. When left unexamined, the Canberra model's (McCormack et al., 2009) assertion that participants provide advice to colleagues draws the focus of program impact back to the development of the individual's capabilities. It evokes a picture of the program participant, fresh with new ideas and knowledge from the program, becoming able and willing to share those ideas with colleagues. It is important to further examine the meaning that Ruth attributed to her experience of sharing ideas with colleagues.

Ruth provided background information about the relationship between herself as a "general practitioner" (GP) and her colleagues as medical "specialists". Medical communication between GP and specialist is commonly about the provision of information, advice and expert judgement through referral processes (Piterman & Koritsas, 2005a, 2005b). The GP provides information about a patient to the specialist. The specialist is the expert in the field and will therefore be the person to assess the patient's condition, provide advice to the patient and then provide advice and guidance to the GP for follow-up care. The hierarchy of communication in the GP-specialist relationship as described by Ruth is clear. Information may travel up from the GP, but the expert advice and judgement travels down from the specialist. In her "surprised" reaction Ruth highlighted that, in her context, providing advice to colleagues cut across her understanding of the existing hierarchically-ordered communication practices between medical practitioners from different fields.

Prior to completing the program, Ruth had felt that these boundaries between fields of practice, which governed discussions around patient care, also limited discussions about medical education. Post-program, her education expertise helped her to recognise and transcend one of the communication divisions hampering collegial conversations about teaching within the hospital. The program assisted Ruth and her colleagues to facilitate inter-professional conversations via the language of education. Other medical specialists in the hospital recognised her growing interest and expertise in education. Ruth noted that they had begun to see her more as a colleague with educational expertise whom they could consult, rather than a co-worker in a different speciality of a lower order of prestige (Creed, Searle & Rogers, 2010).

Through a practice theory lens (Warde, 2005), Ruth and her colleagues resisted the routines and conventions of status and communication flow as they improvised new interactions and conversations. While the Canberra model (McCormack et al., 2009) helps to identify program outcomes and impact on specific people and activities, a practice theory perspective adds insight into outcomes and impact on the nexus of interactions— Schatzki's (2001) "doings and sayings"—that are the basis of organisational cultures and the locus of efforts to resist the old and develop new practices.

Ruth's experiences of program impact related to her perceptions of the isolated nature of her educator role in her organisation. In contrast, Nicole and Naveen spoke about working in units where, even before the program, they had felt part of a community of colleagues who regularly conversed and shared ideas about learning and teaching. Post-program, however, they felt that sense of connectivity had been enhanced because their conversations with colleagues were now informed by their ability to communicate ideas informed by education literature, theory and research. The Canberra model (McCormack et al., 2009) identifies such development of scholarship of/for learning and teaching as a UTD program outcome.

Naveen worked in the medical education unit in the university's faculty of medicine. He noted that the quality of the conversations and interactions with his colleagues had begun to change after the program. The main driver of this was not the program or his work alone. These interactions increased, he noted, as more of his colleagues also undertook further study in medical education courtesy of a national government agenda to raise the educational qualifications of university teachers and modernise university curricula. Naveen spoke of how the program had helped him to form connections with colleagues who were similarly qualified in medical education. With changes in the national government's focus on education, more opportunities for scholarships had opened up at his university. As a result, more teachers in his faculty had completed formal qualifications in medical education:

We now have three medical educators who have their Masters degrees in medical education. So they are like sparring partners for me to discuss anything about our teaching and learning process.

He highlighted the energy and support he got from talking with and working through ideas with these colleagues. Like Ruth, he spoke of the program as having given him greater confidence to engage in discussions with colleagues, but he placed greater emphasis than Ruth on how the collegial exchange of ideas had been improved by the language of medical education. He described his interactions as a helpful and energetic exchange of ideas in a community of like-minded educators who supported creativity and experimentation:

When they or I have an idea on something about the teaching and learning process, we can discuss it: 'This is something creative, this is something new for us, why don't we try this'. In the past because we didn't have that kind of knowledge. . . . Now, since we have degrees in medical education, we have the theory about why we should to do this and then the theory to know what the outcomes will be like, so we'd say 'Okay why don't we give it a shot'.

Naveen's perception of program impact was, at least in this initial excerpt, close to the ideal, hypothetical, picture of impact on the culture of the institution presented in Kreber's and Brook's (2001) adaptation of the Kirkpatrick model (Kirkpatrick & Kirkpatrick 2014). Naveen described stimulating conversations with interested colleagues, seemingly wholehearted and unconstrained acceptance of scholarly ideas, and an energetic and united agreement to implement new ideas.

This valuing of ideas from education-focused colleagues also had an impact on the Dean's interaction with Naveen in that network. He noted that the Dean had started to rely much more on him and his colleagues in the medical education unit for advice

on "fixing" problems related to learning and teaching and the new curriculum. This acknowledgement suggested that Naveen's qualification from the program had given him, at least in the eyes of the Dean, the status of expert and had correspondingly raised the status of his unit:

I think it's something positive. They believe in [the] medical education unit to stop problems because we have the language of medical education.

For Naveen, the language of medical education helped to engender greater trust and credibility in his and his colleagues' interactions with senior leadership, an example of how community connectivity occurs between a participant and senior leadership. This sort of connectivity may develop slowly and may not become apparent to the participants until well after they have completed the program. Naveen communicated this as a gradual building of trust over the three years since he had completed the program. This means that it will not be evident to those models, such as Prosser's and Trigwell's (2006) and Kirkpatrick's (Kirkpatrick & Kirkpatrick, 2014), which attempt to assess impact too soon after the completion of the program. In fact this evolving impact over time is only made explicit in the Canberra model (McCormack et al., 2009), which takes a longer-term perspective on demonstrating impact.

Like Naveen, Nicole reflected on post-program changes to the quality of her interactions with an existing local community of colleagues interested in education. She also worked in a medical education unit with other medical educators. The unit was located in the teaching hospital rather than in the university medical faculty.

Nicole focused first on how the program had helped her to feel that she could provide more research-informed and trustworthy counsel to colleagues:

I think I do my job better. I probably am more confident talking about educational issues and don't just feel I'm arguing for something on the basis of intuition. I can support it with appropriate support. If I don't feel that I have the appropriate argument to support something, I am equipped now to go and do the research and talk to the appropriate people, and to do the research to support a change or retaining something.

Nicole reflected on her growing assertiveness and confidence, which stemmed from self-awareness and knowledge. She observed that the qualification in medical education had helped her feel "more authoritative" in her role, echoing Ruth's perceptions of having more authority to speak on educational issues with colleagues. Nicole perceived that her ideas and actions had become more influential among her community of disciplinary colleagues because of her enhanced grounding in the scholarship of learning and teaching.

Where Naveen spoke of his working environment as one that offered encouragement from colleagues to try out new ideas, Nicole described a similarly supportive work setting, but one where she and her colleagues also disseminated their ideas through education research and conferences.

I think as a group we're lucky at [hospital] that we have an education group that we can be a part of. There is that constant professional collaboration around education. We had several presentations for the hospital at the last [conference]. So it's nice to be able to share that sort of thing and nobody is dismissive of ideas about research around education. It's a valued part of our work where I work.

Nicole spoke in greater detail than had Ruth or Naveen about how the program had influenced her interactions with colleagues on education projects and research. She recalled projects and research that she had begun in the program and how these had sparked further work with her colleagues in the education unit in the teaching hospital. As one example, Nicole recalled that the results of her analysis of students' approaches to learning that she had begun in the program had surprised both herself and her colleagues by revealing a dissonance between teachers' and students' expectations of learning.

We found that students coming to [the specialty] would often complain that they knew nothing about it, even though we knew that they had done 16 problem-based learning cases in the first two years that were based around it. We tried to think of a way to get them thinking back to what they had learnt and give them some confidence that they did actually know something.

Nicole's dissemination of those results via conversations with her colleagues in the unit sparked further innovation projects and research by herself and her colleagues, forming another foundation for new collective actions in their department. The way in which Nicole spoke of the student learning research highlighted the idea of impact as program outcomes influencing interactions with others. She emphasised the collaborative nature of her inquiry with her colleagues, drawn from their shared interest in student-focused learning. The expressions she used—"we found", "we

knew", "we tried"—emphasised the community connectivity aspect of the program outcomes identified in the Canberra model (McCormack et al., 2009).

Nicole, together with her colleagues, recognised immediate ways in which they could help students to recall prior understanding and that this would improve students' confidence to learn and work in the new environment of that rotation. Nicole spoke of the intervention she designed as a simple change ("basically I just did a quiz") but she noted that it had begun as a project in the program: a review of the literature, implementation of the quiz, evaluation, a conference paper and continuation of the work with the next cohort of students:

So I presented that at [the conference] and it seemed from the initial piece of work we did that those students who had done the quiz did better than those who hadn't on the assessments at the end of the term.

When the results of that research project were picked up by another teaching hospital, what Nicole had started as an individual project in the program expanded to a survey, with results shared among colleagues in the unit. Over time, it expanded even further to become an external collaboration with disciplinary colleagues in other institutions. This sequence of outcomes is an example of what the Canberra model (McCormack et al., 2009) has identified as an academic citizenship outcome of UTD programs, with impact on the individual, disciplinary colleagues and, to some extent, on the professional association through presentation of research at professional meetings.

Communicating new ideas about teaching and learning with colleagues also strengthened participants' opportunities for promotion. Nicole and Naveen both spoke of the immediate possibility of being promoted on the strength of their education work. The avenue to promotion was, unsurprisingly, made easier by the presence of a work supervisor who had an interest in education. Naveen explained that the Dean had frequently sought advice about curriculum issues from himself and other educators in the unit and trusted in that advice, which was a credit to their collective work. The Dean specifically acknowledged Naveen's work as the unit secretary, and promised that he would soon be rewarded and "promoted to a higher career". Nicole's supervisor had also recently identified that she should be preparing for promotion to senior lecturer on the strength of her education work, including her education research and conference publications. These experiences of real prospects for promotion was a conduit of program influence on maintaining a culture where teaching is rewarded—an element of departmental culture identified by Gibbs (2010) as important to the quality of learning and teaching.

Ruth, Naveen and Nicole noted that the program had an impact on their supportive interactions with colleagues. The consequences of that impact depended very much on their local contexts and circumstances. Ruth, who had felt isolated in her education-focused role in the teaching hospital, identified the formation of informal connections with some of the clinical specialists with teaching responsibilities. The significance she attached to this experience was representative of more than a transfer of knowledge or information from the program to Ruth, and then to her colleagues. Ruth characterised her new conversations with colleagues from different medical specialties more as an alternative trust network that was formed alongside the established specialty medicine networks that had been the main nexus of communication and expertise in her workplace. In the Canberra model (McCormack et al., 2009), this is identified as UTD program impact on the program participant (Ruth) and her discipline colleagues stemming from contribution to collegial service as nascent academic community connectivity.

Naveen and Nicole portrayed a closer network of supportive colleagues than Ruth. They worked with other education-focused colleagues in education units within their institutions. Naveen's interactions with colleagues were very much directed by the immediate priorities of curriculum implementation and solving teaching and learning issues as they arose through the implementation. The program had strengthened and energised Naveen's contribution to collegial service in the shared conversations and ideas in the academic network of local colleagues in his unit. Naveen felt the impact of this. He explained that his disciplinary colleagues and the Dean collectively came to elicit and trust the recommendations and counsel that Naveen and his colleagues provided, which then improved Naveen's prospects for promotion.

Nicole, Ruth and Naveen sensed that their growing pedagogical expertise from the program was a catalyst for more extensive interactions within their local communities. For Nicole and Naveen, these interactions were focused on new, shared ideas and projects with disciplinary colleagues. For Ruth, these interactions

were focused on new conversations and shared ideas with colleagues from different fields and disciplines. Through these interactions, participants reported developing a greater sense of empowered connectivity with their colleagues.

Empowered connectivity with colleagues took several forms depending on participants' contexts and the presence of established idea-sharing practices. In some organisations, a medical education unit was a workgroup with a history of sharing ideas via teaching inquiry and scholarly projects, the results of which were also disseminated nationally through conferences and further collaborations. In another organisation, idea-sharing was also prevalent but focused more on local conversations between educators in the unit for the purposes of working on locally identified 'problems' in the curriculum. In another organisation, medical educator was a solo role and local conversations and idea-sharing about teaching had to first cut across established inter-professional communication boundaries.

This may become more apparent through the incorporation of social network models in evaluation, such as the work by Rientes (Rienties & Kinchin, 2014; Rienties & Hosein, 2015) and Van Waes et al. (2015). Their studies, however, investigated impact through snapshots taken 6-12 months post-program. The stories from Naveen and others in this study do not identify exactly when this sense of empowered connectivity emerged, but it grew and developed as time went on. The network models do clarify understanding of program impact, however, by highlighting the social and negotiated changes in the dynamics of pedagogic conversations, with trust being a personally experienced phenomenon, rather than something that is bestowed or decreed (Roxå, Mårtensson & Alvetag, 2011).

6.2 Empowered Connectivity with Committees

Committee participation is recognised as an example of a strategic citizenship outcome of UTD programs in the Canberra model (McCormack et al., 2009). Macfarlane (2007) refers to this as contribution to institutional service, a common dimension of the university academic role. Participants acknowledged that the program had an impact on **them** in their work in education committees. They initially spoke of a changed sense of their own credibility as they felt they had new ideas to contribute to committees. Some participants (at least initially) spoke of feeling that education committees were places where their expertise and ideas would be welcomed. They believed that such committees would be interested in discussing ideas and innovations in education.

Ruth, Nicole and Tara noted that their work in the program helped them to feel that they had a legitimate contribution to make in such committees. They spoke of being involved with various internal and external committees in education. The internal committees included curriculum or assessment committees convened by the university faculty and/or the teaching hospital. The external committees were most often regular meetings of the specialty professional associations charged with developing curriculum and competencies for specialist trainees. It is common for medical specialities in Australia to have one (occasionally two) associations that oversee training and accreditation of their specialists.

Ruth was participating in two external committees in her specialty and one internal committee in education. She noted that, post-program, she had become more confident of the value that her understanding of pedagogy brought to the committees. Her reflections on providing advice to the committees were similar to her positive experiences of advising individual colleagues post-program. She spoke of her confidence to question and provide advice on operational elements of the curriculum, again with clinical consultants responsible for teaching and also with academic staff from the university medical faculty:

[Before the program] I don't think I had the confidence to actually talk at the education meetings. I don't think I had the confidence to say; 'Look, do you think we should be delivering this in a different way' or 'Do you think there's a different way we could make this more effective for students?' Whereas I've been able to actually think about things, and think about the way we're delivering and what we're doing, and talk about those things now

Changing participation challenges elements of practices (Lave, 1996). Ruth's experiences illustrated the impact of the program, first in terms of a changed sense of her own value and secondly as program impact on colleagues as their views of the salience and value of their education-related interactions with her changed. Similarly, Nicole commented that the program had helped her to feel that she could more legitimately make a contribution in education committees. She too referred to her

greater sense of self-confidence to participate in the education committees. Nicole spoke of the program as a qualification that justified her place on the external education committee. The external committee was convened by Nicole's professional association to develop the examinable competencies for vocational training in her medical specialty:

Would I have gone on that [committee] had I not done the course? I probably would have gone on it, but I don't think I would have felt as well qualified to be on it, if I hadn't been doing the Masters at the time.

Other participants elaborated on how their greater sense of feeling "well qualified" to participate in the work of education committees had developed as an outcome of the program. Tara worked in a university-based medical education unit. She noted, as Ruth and Nicole had done, that she was now more involved with committee work because she felt she could be a worthy contributor to the work of the committee. Here Tara spoke of having developed a more established sense of her place on the education committee as she recognised that she now shared the common educational language which bound medical educators together:

There is a lexicon now that you build up as a result of this program. Developing that common language I now feel like I have with colleagues and with other people in this industry that I certainly would not have had before.

The work of some education committees involved not just overseeing the smooth functioning of the curriculum but also appraising recommendations for innovation in the curriculum.

In Tara's workgroup there were several education committees, but only one was the main conduit for the approval of changes to summative assessment activities in the medical curriculum. Post-program, Tara worked with a senior professor to revise the summative assessment tasks in a subject in the medical degree. That committee would have to approve the revisions before they could be introduced in the subjects. Tara noted that the program had helped her to plan and justify the assessment changes to the committee. It had helped her to prepare a more scholarly and, thus, more convincing proposal as she melded theoretical ideas from the program with the student evaluation data she had collected. Her account of how she was working to

introduce this change in assessment highlights the negotiated and collective aspects of assessment practices in the context:

I've been talking to a number of students and the different theme coordinators in each of the clinical schools and trying to find some potential solutions. We'll present it in a discussion paper and have a talk about it at a big meeting. What are the pros and cons of the possibilities?

Tara anticipated that her work in evaluating changes to assessment would be put forward to the committee by herself and the senior professor in the discipline who was her supervisor (the "we" of whom she spoke above). While the program had helped her to do the research and put together a case for changing assessment, she expected that communication with the committee would be the professor's domain rather than hers, since she was the junior lecturer in the unit. Her reflections on her sense of a changed role and place on the committee would still seem to align with the concept of community connectivity which emerges from the Canberra model (McCormack et al., 2009), although somewhat mediated by the established hierarchy of communication practices within the department.

In this analysis of participants' post-program interactions with colleagues and committees in supportive networks, the Canberra model (McCormack et al., 2009) of dimensions of UTD program outcomes and impact on stakeholders provides a useful, if bare framework. It has introduced the ideas of community connectivity, collegial service, strategic citizenship and scholarship as dimensions of outcomes and provided much needed detail about how participants' new approaches, knowledge and experiences from the program connected to their work with other colleagues in their organisational settings.

In the main, the impact of the program was on participants' own sense of legitimacy and credibility to participate in the committees. The program assisted participants to feel that they had a legitimate contribution to make in education committees and they were therefore more likely to volunteer to participate in education committees and to offer advice in the meetings. Deeper exploration of the meaning participants attributed to their changing participation highlighted their changed sense of place in their interactions with colleagues, as they became more empowered to speak, advise, share and disseminate ideas. Participants felt more secure and legitimate in their place on education committees. They located themselves within the language of education and their place on the committee was legitimated by their use of research and scholarship.

These experiences of empowered connectivity with committees, as with colleagues, were implicated in the practice of idea-sharing in the various workgroups. Committee meetings were a means for communicating and disseminating ideas, an important element of the scholarship of learning and teaching (Martin, Benjamin, Prosser, & Trigwell, 1999). Committees and their members had a role in perpetuating and varying practices, such as assessment practices. Having the individual confidence, the common educational language, or the scholarly work to support a proposal would not in itself, however, be enough to ensure participants' ideas would meet with committee approval. Tara's experiences indicated that participants' changing sense of place in providing advice and participating in education committee work unfolded within the existing idea-sharing practices and the communication hierarchies located in the various workgroups.

Within the limited framework of the Canberra model (McCormack et al., 2009), it would be correct but simplistic to portray participants' experiences only as increased participation in and advice to committees. While their involvement with committees shows that the program had an impact on participants and their individual contribution to institutional service, this congruence with the model reflects only part of the participants' accounts. As discussed in the next section, they recounted far more complex interactions, particularly when they challenged existing education practices.

6.3 Conflict, Resistance and Inertia from Colleagues

Advising colleagues was not always a positive or supportive experience for participants. Lave (1996), working from a practice theory perspective, cautioned that changing participation also challenges existing practices. There were certainly times when participants found that offering advice or suggesting changes in practice to colleagues represented a challenge to existing collegial networks and caused problems. In several cases, their changed conversations and interactions with

colleagues resulted in conflict and resistance. This facet of impact is rarely articulated in impact models, which have tended to focus only on impact as a primarily positive phenomenon. For example, negative outcomes are reported not as impact but as side-effects (Wergin, 1977) or obstacles to impact (Stes et al., 2007). Practice theory suggests that, without disputation, lasting impact is unlikely to occur (Schatzki, 2002). From this point of view, the stories of successful impact on colleagues are stories of circumstances which favoured participants' efforts to minimise conflict and resistance, or to manage it successfully. The stories in this section illustrate cases where participants were not so fortunate.

From participants' accounts, it is clear that their actions illuminated and disrupted existing practices within networks of influence. Omera, Naveen and Ruth all described occasions when providing advice to colleagues represented a challenge to the established political order of their department. Ruth had the means and formal avenues to pursue her counsel further and push for changes to colleagues' practices, but Omera and Naveen observed that, in their contexts, such action caused (or would have caused) them to come into conflict with others in their department, with potentially undesirable consequences for their own careers.

Omera recalled that, as colleagues began to turn to her for medical education advice after she had completed the program, this had negative consequences for her relationship with the medical education unit secretary who had previously directed the work of the unit. Some of her colleagues had "wanted to know more about what people are doing outside", particularly in relation to assessment within the new competency-based curricula that the faculty was working to implement. She felt that, when she did provide such advice to colleagues, it had no impact since time and again the unit secretary rebuffed her suggestions and worked to block her ideas. The secretary argued down her suggestions by dismissing them as foreign and inappropriate for their students:

She [the unit secretary] said 'we cannot adopt all of what you have learned abroad to our current faculty!'

Omera felt, however, that the secretary's objections had less to do with student learning and more to do with the challenge Omera's advice represented to the established order of authority and expertise. Omera suggested that the secretary had rejected her ideas because the secretary took personal issue with her (Omera's) growing influence in the unit. Omera believed that the secretary took a stance against her proposals from personal distrust and from an attempt to protect her own influence:

Ah yeah [wry laugh]. Before I got back to [my country] she was the place for people to ask something but when I got back people saw me and discussed and believed me more maybe.

When departmental leadership undervalued teaching, as Omera suggests below, it became more difficult for participants to engender enthusiasm for educational development and innovation among their colleagues. Omera postulated that the unit secretary ("the lady") had previously been the source of expertise in the unit mainly due to the fact that the actual head of the unit was focused more on his medical responsibilities and less on education:

The head of the unit is not really interested in faculty development. He is a specialty professor, so he's busy. So everything in the unit is managed by the lady.

Omera thought that the unit secretary was seeking to maintain existing practices, rather than engaging with the new ideas Omera had brought from the program. This interaction foregrounds elements of what Trowler and Cooper (2002) call the group teaching and learning regime—the "constellation of rules, assumptions, practices and relationships related to teaching and learning" (p. 224).

Omera articulated multiple dimensions of identity and subjectivity that impinged on the assessment practices of the workgroup: the professor who neglected education leadership because he saw his medical work as more important; the secretary who rejected ideas from scholarship because of its external origins. She observed that, although she had the power to change assessment in her subject, the dissemination of different approaches to assessment was restricted by the power arrangement in the medical education unit. Rather than stimulating social interactions through discussion of ideas and new approaches, the power relations in the unit worked to quarantine them from external ideas and perpetuated a discourse of education as control. When Omera finished the program she became the first person in her department to have a master's degree in medical education. Although she may have been recognised as an authority on assessment and medical education by her colleagues due to the knowledge she brought from the program, it was the unit secretary who was in a position of authority, due partly to the status she drew from her position and partly to her seniority. Here Omera alludes to the secretary's seniority and her habit of arguing down Omera's suggestions:

In our faculty I'm still young and so sometimes I feel not quite brave or not quite comfortable to argue with people who are far older than me, especially when they defend their argument not in the right way.

Omera felt uncomfortable and ill-equipped to argue with a more established, older colleague. So while the impact of the program had been to expose her to new knowledge and experience, which she shared with some of her colleagues upon her return, the influence that this form of academic citizenship could have within her unit was severely curtailed due to the established order of deference which remained unchallenged despite a shift in actual levels of expertise. In this instance, the impact of the program was to challenge but not change existing academic networks and practices. The impact on Omera was to make her feel alienated from the existing academic community in the unit.

This chapter began with Ruth recounting the changed interaction between herself and colleagues from other medical specialties as they approached her for teaching advice. For Ruth, that new interaction with her colleagues represented a positive challenge to the divisions between the specialties within the teaching hospital. Ruth's earlier recounting of her experience provided a snapshot in time when particular elements of the collective educational practices in the hospital had been altered as the valuing of educational expertise sparked actions that interrupted the pre-existing gradation of specialty knowledge.

That shift was not, however, representative of all Ruth's interactions with her colleagues. When one of her colleagues refused to act on her advice, Ruth, like Omera, found that the influence of her ideas with some colleagues was curtailed by the established order of expertise. She described one difficult interaction with a clinical specialist in the teaching hospital. When she reviewed the curriculum for a

particular specialty's rotation using the theoretical framework from the program (the curriculum constructive alignment matrix), she felt she had identified an urgent situation where the specialty (obstetrics and gynaecology) was unfairly assessing students using patient case studies that required too high a level of comprehension and skill. The implication was that students would fail the assessment without just cause and that they would not have received the feedback they needed to improve their performance. Ruth identified this as a real and important risk. Here she speaks of that assessment activity, a clinical examination known in medical education as an objective structured clinical examination (OSCE):

We've tried to implement it [the curriculum matrix] with the students – actually not all of it successfully. I was very cross I suppose, confused, angry – I don't know what I felt but when I was reviewing the obstetrics and gynaecology assessment I found that the students were supposed to be doing an OSCE. What they were actually doing didn't align with what they were learning. Often the cases they were given didn't match with what they'd actually done during the term. They were given some very complicated cases.

In the following extract she discusses further inadequacies in the assessment and the source of her dissatisfaction with this approach to assessment becomes clear:

I was also very upset that the OSCE involved a doctor actually examining, but no patients and no role-playing patients. I couldn't work out how they could do an OSCE without having a role-playing patient. The doctor was doing the questioning and pretending to be the patient. Since we had male examiners, I couldn't quite work out how they could do that. I was very upset about that.

Ruth was incensed that anyone would think it appropriate for a male doctor to use their male body to assess how well students did in an examination on obstetrics and gynaecology—the branches of medicine concerned with aspects of the health care of women, specifically with the care of the female reproductive system and the care of women before, during and after childbirth:

When I asked the obstetrics and gynaecology department at the [the University] that was organising it, why I wasn't allowed to have actors acting the part, I was told that was the way they've done it for 30 years and that was the way they would continue to do it.

It seemed glaringly obvious to her that the assessment bore almost no resemblance to the kind of clinical assessment that it was "supposed" to be. She expressed pointed criticism over the disparity between the intended modern method of assessment (an OSCE) as written into the curriculum and what was actually occurring in the hospital. She highlighted that this particular assessment practice had continued to exist because of an implicit and now, due to her inquiries, more explicit agreement to continue between the assessor (a senior clinician) and the learning and teaching committee. She alluded to the fact that this occurred even when the assessment no longer fitted the actual definition of the assessment as had been written into the curriculum after approval by the curriculum committee.

Ruth spoke of her frustration when her colleagues refused to act to alter an assessment activity being carried out by a senior specialist. She found that her advice placed her in opposition to the actions of one of the school's more senior clinical teachers. She explained how she had tried to use the decision-making hierarchy to have the assessment reviewed and changed:

All my attempts to put actors in there have failed. So until the Professor retires, that's the way we're going to be doing it. I felt that was a) not aligning the learning objectives with the assessment, and b) the assessment was totally mad.

The department rejected her suggestions, defending what she saw as an out-dated and wildly inappropriate technique as a long-standing and time-honoured routine. What she thought was an isolated example of poor work by a single doctor, they defended as something that was sanctioned by the professor of the discipline. It appeared to Ruth that the department refuted her suggestions not because people in the specialty had thoughtfully reviewed them or weighed up the relative merits of the different assessment techniques. Rather, the specialty had defended its right not to change by appealing to the collective expertise and authority of the specialty department headed by the esteemed professor.

Ruth understood that the department was paying greater heed to medical expertise and status than to the principles of education or her expertise as an educator. She continued to advocate for a change in assessment and chose next to address her concerns to the combined hospital-university committee on teaching and learning and then to the faculty's associate professor. Ruth framed her communication to each from an "educational point of view" in the expectation that they would have greater understanding of the education perspective, rather than allegiance to any particular medical discipline: I wrote [long sigh] a letter explaining how I felt about that from an educational point of view, and I sent that to the Teaching and Learning Committee. They told me they'd look into it. We have a new associate professor appointed as Associate Professor of Teaching and Learning this year. I have sent her a little note about it but I haven't had a reply yet.

Ruth's earlier outrage had turned to dismay and frustration. Her long sigh punctuated what seemed to be a feeling of wasted effort over the letter she sent to the committee. The professional expertise of "the doctor" and "the professor" helped to perpetuate the existing actions. Practices contain elements of agreed values and ends that perpetuate action. Ruth's actions in using a matrix of constructive alignment from the program to review how students were being assessed had placed her education expertise and particular educational ends and values in opposition to the work of her colleagues who perpetuated the existing approach to the assessment method.

Resistance and opposition from colleagues and senior managers commonly inhibit curriculum innovations (Hannah & Silver, 2000). Workgroups and departments regularly reinterpret education initiatives. Their practices, or what Trowler (2009) calls teaching and learning regimes, perpetuate the continuation of what works locally and the established understanding of appropriate methods of teaching and learning in the discipline. Ruth highlighted that the expertise of "the professor" was located in the professor's senior status in the profession of medicine. The adherence to inappropriate and out-dated modes of assessment seemed to be held in place by a single person. However, as Ruth tried different strategies for changing the assessment, it become clearer that colleagues had allowed a poor practice to continue. It was not solely the work of the professor; rather, others in education leadership positions had allowed him to continue unopposed and seemed not to want to intervene to assist her efforts. Ruth's experience exemplifies the resistance to change inherent in shared, established, negotiated practices, as described by practice theory.

In the Canberra model, providing advice to colleagues is an example of how the program can have a positive impact on the participant's environment. However participants' experience showed that, although there were times when that advice was welcome, there were also times when that advice was not received well by colleagues.

Naveen also spoke of providing advice as a double-edged activity. He recalled that, during the program, he had developed a new understanding of the influence of feedback on student learning. Previously he had used feedback to punish students for incorrect answers or mistakes. In the program, he had personally experienced how constructive feedback was more of a supportive dialogue between teacher and student with positive effects on students' motivation to learn. He realised that he had changed how he now guided students with constructive feedback in his classes, but that students continued to be affected by punitive feedback from the clinical educators in the teaching hospital:

When you make a mistake, they punish. They don't show you how to fix it or solve the problem. No, they don't do it. They just give you punishment, that's it.

He recognised that his new approach was consistent with the practices of educators from the program but at odds with the practices of his colleagues in the teaching hospital. Drawing from his own new knowledge and expertise from the program, he juxtaposed the accepted local way of publicly punishing students with punitive verbal feedback in front of students' peers and patients with what he had experienced in the program. It was something which he recalled having endured himself as a student and which he now saw as "old-fashioned" because he had experienced and come to value a different approach to feedback from the program:

It's like they [the clinical educators] still use what they got when they were students from a long, long time ago. They still give rude feedback to students like: 'Oh you're such an idiot'. They still use it. I think – 'Come on, it's not good for the students'. I think the students will react to it very badly.

Naveen, like Ruth, was vexed that such a practice had continued unchallenged for so long and exasperated because he saw no future possibility for change. He saw that, just as the clinicians themselves would have been harshly criticised as students, now the same clinicians used harsh criticism, bordering on humiliation, to punish student mistakes and goad students to learn. Doctors' use of fear, embarrassment and humiliation to motivate students to learn is an omnipresent but questioned tradition in medical education (Seabrook, 2004). It occurs because doctors continue to teach in the ways they were taught but also because of the promotion of emotional distance

and detachment in "the cultural norms of medicine and the process of professional socialisation" (O'Callaghan, 2013, p. 311).

Naveen's frustration stemmed from his sense that he had the expertise to change the existing practice but he felt certain that, in this instance, he would have no influence on colleagues' perpetuation of poor educational practices. He wanted to use his knowledge and his own experiences of changed actions from the program to advise his colleagues but could not do so for fear that, in his context, such advice would be interpreted as impertinent criticism of higher-ranking colleagues. Naveen echoed Omera's experience of wanting to lobby for what he had identified as necessary changes to improve the student experience but, like Omera, he felt he had to hold back from pushing for change due to the anticipated consequences of challenging the influence of more established colleagues.

Although Omera and Ruth had, at least initially, felt able to provide advice to colleagues, even when their suggestions were rebuked, Naveen reflected that in this particular circumstance the established order of professional expertise was so rigid that he could not even suggest that the senior specialists alter how they interacted with students. Here he briefly imagines the conversation and expresses scepticism that it could ever take place. It was impossible that the clinician would ever pay attention to him, and impossible that he could ever criticise a superior in such a way. Here Naveen characterises advice, not as the logical exchange of expertise between equals as the Canberra model (McCormack et al., 2009) suggests, but rather as impertinence and criticism:

They are older than me and they used to be my teacher, so it's quite difficult for me to say: 'Hey. Hello. You can't say things like that!' In [my country] it's really difficult to say something to someone who used to be your teacher or someone who is your senior. . . Right now I think my focus is for myself first, because it's still a bit difficult think to influence another lecturer, especially anyone who is older or more senior than me.

Naveen suggested that it was a national cultural characteristic not to question one's seniors. The idea that one must not question more senior doctors has, however, been characterised as a widely acknowledged assumption in medical practice and medical education (Haidet & Stein, 2006) which aligns to a less easily recognised cultural premise that "hierarchy is necessary" (p. 517). Advising the more senior medical

educators would have challenged the hierarchy, which Naveen felt would only have reflected badly on him. Although Naveen worked productively with others in the university medical education unit, exchanging ideas with colleagues there and with colleagues in similar units at other universities, he felt that he and the unit had little influence over the entrenched practices of clinical educators in the teaching hospital. He returned his focus to changing his feedback interactions with his own students. This supports O'Callaghan's (2013) suggestion that changing individual teacher's approaches will have positive benefits for their students but only whole-system change initiatives, such as team or institutional level strategies, can appropriately tackle the negative aspects of culture in medicine.

6.4 Conflict, Resistance and Inertia from Committees

Some participants' recounting of their experiences in committee work challenged the depiction of impact as individuals applying their knowledge and skills with relative freedom to change organisational practices. As was the case in their interactions with students (Chapter 5), participants reflected on everyday approaches to learning and teaching in their local workplace settings which, after the program, seemed unacceptable. In committee work, however, participants' experiences told of a protracted, contested, negotiated process of trying to shift how and why their committee of colleagues perpetuated particular education practices. Their experiences highlighted a much more social process of change. In this section I examine how different elements of existing practices came to the fore to exert a moderating influence on participants' actions.

Contribution to the strategic work of learning and teaching committees is identified in the Canberra model (McCormack et al., 2009) as an outcome of the program with the potential for impact on participants, colleagues, senior leaders and the organisation. Omera, Nicole, Baden and William spoke of times when they found the ideas they contributed to those committees were contested or were seen as antagonistic to the practices of the committees. When these participants sensed an organisational inertia to the changes they tried to implement, they employed a number of approaches. In some instances they stepped back the scope of the changes; in other instances they adopted a wait-and-see approach or directed their energies elsewhere; and in some instances they actively marshalled supporters to add weight to their case.

Omera was despondent about the gulf between the improvements to assessment practices that she had hoped to make in her faculty and the changes she had actually been able to implement. She had successfully created a new assessment committee and, via that committee, had introduced one new assessment (an OSCE) into the curriculum. She spoke only very briefly of it as a success:

We succeeded to do one OSCE for the final exam. We had 250 students and it required big work at the time. . . . The committee felt—we feel satisfied with the result [as did] some of the lecturers examining the OSCE.

However, the committee had failed to be the engine of change that Omera had planned. Without her further input on the committee (as she was on extended study leave from the faculty), she noted that its momentum had stalled after just a little more than a year:

I've got information that the committee is not running quite well. They look like they are administration. They just do administration but we had planned on doing something more important for the assessment.

When Omera reflected on wanting to change assessment practices in her unit, her initial description echoed the usual Kirkpatrick model's path of individuals applying ideas from the program to their work. She spoke of a personal conceptual shift followed by an individual critical interpretation of existing practices and a desire to use ideas from the program to change the existing situation:

I found that [with] many aspects of the current assessment we have not implemented best practice in assessment, especially with the use of norm group not criterion referenced assessment. Also we have no standard setting and decision-making procedure.

She observed that the program had helped her clarify her conceptions of assessment as a way to help students to recognise and improve their own performance. She felt personally motivated to improve what she called "the system of assessment" at her university and noted several times that the faculty's existing methods of assessing students were not productive for student learning and did not generate a "true picture" of students' performance. A changed perspective on education practices was a motivating influence on participants to improve curriculum. If, however, they found that this changed perspective was not understood or supported by their colleagues, it had the potential to have a negative impact on their interactions with colleagues and a negative impact on their careers in medical education. As Omera found, there were times when UTD program participants felt they had no effective support network within their local workgroups to aid them in championing or disseminating the ideas they put forward. Omera quickly identified that knowing about best-practice methods, particularly in assessment, would not necessarily mean that implementing such methods was possible in the collective decision-making mechanism of a committee. Her assessment committee colleagues felt they could do little with the ideas she proposed on criterion based assessment methods:

When I told them that it's maybe not good practice in assessment, so how we can change it? At the time maybe only a small number of people understood what I said. Even though they understood, we have no power to change it because it comes from above the level of the faculty, from the university and from the national [government].

Omera spoke of established rules and values associated with student assessment that limited the changes she could introduce and negatively affected the sustainability and longevity of the changes she did introduce. She felt that, in her absence, the departmental approaches to assessment would revert to how they had been prior to her changes. In the university context, Omera noted that curriculum policy was influenced by national government mandates. She saw assessment as a system that she should change but also realised that the entire system of grading needed to be changed through policy at the university and government level, not just single assessment activities. In this case, Omera described a sense of futility that she or her colleagues would not be able to do anything with this knowledge of best practice. When she spoke of these different procedures in assessment with her colleagues, some simply did not understand her point and others accorded it a low level of importance and value, because it was not something they saw as within their sphere of influence or control. Omera felt that the inertia preventing curriculum change at the university was exacerbated by the direct top-down influence the national government had on the curriculum. For example, despite the government's new national policy in competency-based education, the government also continued to

mandate norm-referenced assessment. This apparently contradictory stance enabled entrenched ideas regarding assessment within her faculty to remain unchallenged.

Omera reflected on the department's approach to student assessment. She revealed that the scope of the changes she proposed seemed to make it difficult for her colleagues to connect with her perspective. She concluded that she had arrived at a different understanding of assessment to that of the rest of her department. She maintained that wider changes to student assessment were needed to improve what she called the "system" of assessment.

Omera spoke of encountering the different organisational layers at play in the maintenance of teaching and curriculum practices. Her experiences fit with Bigg's (2014) depiction of innovation being "constrained by the hierarchy of rules and procedures" (p.10) within each layer of the organisational ecosystem, including institutional bureaucracy and departmental collegial structures. Certain rules, such as the use of norm-referenced rather than criterion-referenced assessment, were explicit and formalised in policy. In her earlier conflicts with colleagues, Omera had also encountered other rules which were more to do with the social aspects of interactions and practices, such as the rules about not challenging one's superiors if you wanted a career in the organisation.

She said of herself "I just looked like a tiger without claws". She may have contributed to the strategic work of learning and teaching committees, but she did not have the authority (the "claws") to actually change the education practices—in this instance the assessment practices of the unit. Practice theory suggests that she had set in motion changes in actions but these did not ever become changes in practices.

Omera concluded that her faculty would not implement the changes she felt were necessary and she took a leave of absence to pursue higher qualifications in medical education:

I had planned to do a PhD, especially after I experienced not good acceptance in my faculty, especially from people that don't want me to change anything. . . .When I tried to change something but there was no approval from the faculty I felt disappointed. People said to me 'Why don't you continue your PhD and you continue your study up to PhD soon rather than just at the campus without bringing anything'.

Even the faculty colleagues, whom Omera felt had offered her support, concurred with Omera's own view that she would not achieve the changes she outlined from her existing position in the department. Omera expressed a conscious choice to move away from the work of the faculty, and the constraints she described there, to work on the decision-making layer above that of the university and faculty. She had used the program to continue her career in medical education, noting how the connections she had made with academic staff in the program and the advice she received on how to pursue a doctorate had helped with the pragmatic aspects of further study, such as how to find a supervisor. The research and ethics proposal she had developed during the program proved to be an effective starting point for further research in the area, which in turn led her to pursue higher qualifications in medical education:

Now I'm looking at how currently [specialists] in my country can improve their performance after graduating from medical school. My current research has been approved by the [national] Medical Association. I hope the results of this research can give some recommendations for the government about the assessment of the doctors.

Following the course, she depicted herself as having diverged, for the time being, from the expectations of the faculty and now was working through research and scholarship to influence the profession's expectations of its practitioners, which would in turn influence government's expectations of the profession. In describing this, Omera expressed a sense of hope for a new professional future.

In Omera's national context, there was no professional body to serve as a moderating layer and potentially lobby for and interpret curriculum practices. This both engendered and amplified the organisational circumstances that Omera felt had made it difficult for her to gain acceptance for the improvements in assessment that she had sought to make after the program.

Nicole and Baden spoke of addressing curriculum change by directly addressing colleagues in the professional accrediting bodies in their specialties, the layer between the teaching hospital and the national government. In the Australian context, a range of professional bodies is involved with developing, administering and accrediting the curriculum and training of doctors. For doctors with an interest in education, these bodies provide an avenue to consultation and education leadership responsibilities in their profession.

Nicole and Baden's stories highlighted how some local curriculum practices were constrained by professional bodies external to the teaching hospital. The program influenced how Nicole and Baden interacted with colleagues at the strategic level, but only Baden spoke of having an impact on the professional association in his specialty.

Nicole reported that the program had caused her to focus increasingly on evidence rather than tradition:

I tend to be even more analytical and want to know what's the evidence for that and I'm sure that's been fostered by doing the course. So I'm forever saying what's the evidence for that, how can they say that, what's the evidence for that?

Nicole felt that this "critical and scholarly" approach, as she called it, put her at odds with her colleague over the design of the national specialty curriculum. She opposed the design process for the specialty's national curriculum when the curriculum committee of clinicians and educators from the specialty college [specialty E] began to design its first official curriculum for basic trainees³. Nicole believed the approach of the college was unsound. She described working on the committee and trying to change how the curriculum was being developed:

That was a funny one, because they didn't want to be involved at all with thinking about implementation. So you just set up learning objectives and there was very little thought given to learning experiences or to assessment. There were some suggestions made [in the final curriculum document] but that was all. That was a pretty weird experience. Of course now they're trying to implement it and it's usually difficult because there aren't the resources to ensure the appropriate learning experiences and assessment. . . . Not that raising my concerns about any of this made any difference, but I registered my protest and one of these days I might say to someone I told you so. [laughs]

In reflecting on her experience, Nicole framed the situation as one that was doomed to end in a poor result for the curriculum. She depicted the committee as immovably tied to its mistaken position but she did not seem to know why this was the case. She

³ The Basic Training phase occurs after the physician has completed one or two years of work (usually hospital work) following their medical school training and one to two years of work (usually hospital work). This is explained in greater detail in Appendix G, Training and Career Paths in Medicine.

was bemused by the position they adopted (it was a "funny one", a "pretty weird experience") and portrayed herself as the sole voice of "protest". Nicole spoke of using the course as a "foundation" from which to explore and "investigate", to be "critical" and "scholarly" but found that her experience and knowledge was sidelined on the committee. Nicole reflected that she could not agree to or abide by the direction the committee has taken on the curriculum, but that her knowledge and her resistance had been futile.

For Nicole, the college was creating curriculum in defiance of the education theory she had learned and contrary to the approach used and supported in the teaching hospital. She found herself in a committee acting against what she and her colleagues had internalised as best practice but she could not change the resolve of the committee to pursue what she saw as the wrong path. Schön (1983) notes that such conflict is not unique: "practitioners are frequently embroiled in conflicts of values, goals, purposes and interests" (p. 17). Different approaches to curriculum design can be conceptualised as different curriculum practices. Each practice is held together by what its participants consider acceptable: "ends, projects, uses (of things) and even emotion" (Schatzki, 2005, p. 471). The committee saw their role as identifying what trainees would learn. In that sense, the members acted as keepers of the professional lexicon of knowledge. They worked purposefully as expert articulators of the knowledge, skills and attitudes that indicate competence and membership of the profession as defined by the curriculum document. Nicole and her unit acted for a different purpose. She saw that student learning occurred through what students did to learn the objectives and how students came to recognise their own understanding through assessment. Having experience and knowledge of curriculum theory informed Nicole's forecasting of difficulties when the curriculum as written was to become the curriculum as enacted in the hospital. This experience and knowledge, however, did not affect the aims or work of the committee.

In Nicole's account of her experience, the program had no impact on the organisational education practices perpetuated by the curriculum committee. The program was a formal qualification that had helped her to become a member of the committee, but the practices related to assessment and curriculum design in which

she had participated during the program remained as practices within the program and Nicole's own knowledge.

Nicole's and Omera's stories show that there was a notable difference between the practices involved in joining the committee and the practices involved in influencing the decisions made by the committee. Joining and influencing are often conflated in evaluation models. Bowie et al. (2009) and the Canberra model (McCormack et al., 2009) both describe service in such committees as a desirable outcome of completing a UTD, but such a depiction assumes that joining a committee will lead to influencing the decisions of that committee. These models do not overtly address the possibility that participants might feel impotent or sidelined as their recommendations are ignored.

According to the Canberra model, it is important that people with an interest in education, with a student-focused approach to learning, and with current knowledge of good educational practices are not locked out of decision-making spaces such as education committees. This could create an understanding of committee membership as a seat in a space in which decisions are made. This understanding perpetuates the container view of context, rendering committees as a context with set boundaries within which predictable functions occur. A practice view of the space or site of a committee, by contrast, conceptualises the committee as a social arrangement of decision-making practices. The committee functions through the shared understandings of its members and, through these shared understandings, creates agreement on its decisions about curriculum practices. The ability of one individual, no matter how well credentialed and enthusiastic, to shift shared understandings is severely limited, unless some crisis or concrete problem creates a felt need in the committee to value a different perspective.

Baden noted that his work on new approaches to assessment in the program helped to bring him and his ideas to the attention of his disciplinary colleagues in his professional body, the specialty college. He identified that the program had an impact on his interaction with disciplinary colleagues at the education meetings convened by the college. In the program, he had undertaken a research project on new workplace-based assessment practices and "these hot new ideas coming from the UK" had the potential to enhance the quality of specialty training by introducing new and more authentic methods of assessing trainees' performance. The professional body, eager to hear about the ideas from his research, invited him to present at the college education committee meeting. At the time, he thought this showed great promise for changing assessment practices. After the meeting, however, it seemed to him that his ideas, although welcomed by an interested committee, were not pursued any further. His suggestions were not immediately rejected as Nicole's had been, but he felt that they were widely ignored and that, at the time, he was not sufficiently influential within the professional association to further advocate for them. This shows that resistance to change in existing practices does not require obvious disputation but can occur through a process that is nonetheless active. Ideas can be listened to but set aside and participants' attempts to negotiate change can simply be politely and quietly disregarded by committees.

Feeling that he hadn't made any headway with the college, Baden continued to focus on his education work in the teaching hospital. As the director of training he was able to maintain his interest in assessment locally. Although the college controlled the final assessment of trainees, his role in the hospital meant he had been able to introduce new more formative assessment activities for specialty trainees although the final formal summative assessment set by the college had remained unchanged. Baden changed what he had the formal authority to influence.

Three years later another opportunity to collaborate with the college to change assessment became available and he joined the association's assessment committee to review the specialty's training curriculum. The views of the college on assessment had changed. He noted that the earlier gap between his own and the college's positions on assessment and curriculum had lessened:

They've since used some of that information [in my proposal] to help them. The model they're using now is not so dissimilar to something that we'd done as a [pilot] project [in his hospital] earlier on. So that's been rewarding, and I think one of the reasons why I'm now on the college committees.

Baden felt somewhat bemused but harboured no rancour over the length of time the college had taken to come around to his earlier recommendations. He depicted a harmonious connection between his education interests, the education projects born from his work in the program and the curriculum work of the committee. When

Baden spoke of "feeling useful" to the college he portrayed a sense of their shared goal of effecting change in the assessment model in the rewriting of the national curriculum:

So at the moment we're working on the curriculum for [the specialty's] advanced training nationally. There were projects that I did that made me interested in assessment, and so as the college moved towards workplace-based assessment model I feel like I've been useful to them at that level as well as on the floor here in the hospital. I'll hopefully be able to help introduce that sort of experience to training on the floor. . . . The college has been a little bit on the back foot in terms of getting things going. But hopefully we'll make a good job of it. We'll see.

Baden's depiction of the committee was that of an active and harmonious entity. He talked actively and inclusively about the work of the committee ("we're working", "I've been useful to them", "hopefully we'll make a good job of it"). There was hope in how he spoke of the direction of the college from a bad place to a good one. In framing the committee in this way, Baden depicted his role as a member of a partnership. He was pursuing new educational goals through his own work and he and the college were on a complementary track. This notion of a partnering role also existed, as Baden pointed out, because the curriculum was reliant on Baden (and other clinicians in his specialty) "helping" to enact the curriculum on "the floor here in the hospital".

Baden's experiences of working with the professional body in his specialty were in stark contrast to Nicole's. Baden characterised his and the college's work in education as a cooperative interaction, albeit one that had been delayed by a protracted period of inertia. Nicole spoke of her interaction with the professional body as a more distant and less cooperative relationship. This reflects the reality that professional associations in different specialties operate as different contexts. It also highlights that curriculum changes, specifically changes to assessment, require negotiated changes in relationships and practices. Such changes take time to form, reform and stabilise.

The time it took for the program's impact to manifest was longer than the amount of time that is usually allowed for in UTD program impact studies. The length of time needed to see particular kinds of impact makes it difficult to attribute that impact directly to the program. Moreover, as participants questioned and challenged the existing teaching and learning regimes in their local contexts, they frequently dealt with conflict by withdrawing and returning to working within whichever local context within which they felt they had the freedom or support to teach and assess in more student-centred ways. Participants had to navigate some negative emotional impacts, such as frustration and confusion, and potentially negative professional impacts if they experienced conflict with colleagues.

In the stories of conflict presented thus far, the participant acted to introduce changes and colleagues resisted those changes to maintain the status quo. William's experiences were different. He spoke of using his knowledge of theory and research from the program to work with clinical colleagues to resist changes proposed by medical educators. Rather than feeling frustrated and disempowered by the conflict between clinicians and educators, he successfully used the program to maintain his specialty's existing assessment practices. In this example he recounted using concepts from the program to reinforce his advice to the education committee and reject a proposal to change the manner of assessing students in his specialty's hospital rotation:

The [existing assessment] is real-world. That's what real doctors have to do all the time down in casualty. If you take it away there is no incentive to spend an hour with someone, which in [my specialty] you particularly need to.

If we take it away we've taken away the drive for students since assessment drives what they do. [Before the course] I wouldn't have been able to say – 'well you know, as we've learnt, assessment drives learning activities'.

In a simple analysis of William's experience, he had transferred key ideas and scholarship from the program, translating them to suit the committee's circumstances. He used the idea that "assessment drives learning" to enhance the scholarly credibility of the profession's existing assessment practices. Elsewhere he noted that, as a result of the program, he was "able to search for literature" and "weigh it up", suggesting that he had incorporated the habits of scholarship from the program as a way of lending weight to his input to the committee. For William, this use of evidence also resonated with the evidence based medicine (EBM) movement (Sackett, Rosenberg, Gray, Haynes & Richardson, 1996). He spoke of the similarities between the EBM and the professional development of medical educators. His

approach to evidence was not just that education research could lend weight to his actions in the education committee, but that it was possible to find research evidence to counter others' evidence-based arguments:

I actually knew what they were talking about. I actually knew. I'd read the literature on the unreliability. Also I was able to search for literature that showed the good points. Being able to weigh it up I think I could contribute to the case.

William knew that no evidence was irrefutable and used the language and resources of medical education to counter the strength of the educator's case. Rather than pushing for changes in assessment, he had drawn from the professional repertoire of medical education to bolster his specialty's rationale for maintaining their existing assessment practices.

Even though William sought to perpetuate rather than change existing practices, legitimacy, authority and conflict were still features of his work with colleagues on the curriculum committee. He depicted the committee as a campaign between clinicians and educators—each certain that their position in the debate was well founded. Unlike other participants, however, he seemed able to strategically direct and leverage the discord between the professions:

The [existing assessment] has always been under threat. There has been this tension with it. The clinicians want it. [Those in my specialty] in particular want it. A lot of people at [the University's centre for medical education], and [the professor from that centre] weren't that keen on it. They talk about its unreliability.

William distinguished the practices of his specialty field from those of the medical education professor on the committee. He argued that his specialty uniquely understood illness as a holistic entity and that the professor's medical field did not place the same emphasis on holistic care:

If you take [the existing assessment] away there is no incentive to spend an hour with someone, which in [my specialty] you particularly need to. The hospitalised patients in particular have all got multiple things going on at once and unless you get the full picture you won't be able to do it—a bit different in his [the medical education professor's] specialty.

In the other stories of conflict, participants spoke of circumstances where they felt marginalised by their colleagues, that colleagues saw their ideas and advice as antagonistic and alien. William instead spoke of rallying the support of senior clinicians to rebut the ideas of the medical education professor on the committee. Earlier, when William noted that the education professor would not know "their" real world, that the professor's specialty was "different", he emphasised the lack of shared conversations between the specialities, which Ruth had also noted. Rather than using education conversations to set aside the differences between the specialities as Ruth had done, William cast the medical education professor as an outsider, devaluing the professor's arguments for change and strengthening the position of his own specialty's ideas.

William spoke of the scepticism with which he and his colleagues treated the counsel provided by educators. He portrayed the educators as estranged from the realities of clinical practice and as representing a discipline with ideas and language that kept them alienated from what clinicians valued as expertise:

I have sat at committees where I've been embarrassed by what the clinicians have said. Medical education people they're all nice. I mean generally they are just nice people, they are not arrogant generally. They listen to other people's opinions. Pure clinicians are not necessarily that way. I've seen it where it's clear that senior clinicians have no idea where the medical education people are coming from, so they dismiss it. The natural instinct if you don't know is [to think] 'This must be stupid. I don't understand this'. So I've seen that disconnect.

On the other side, if I was to be critical [medical education] people do come up with a theoretically great curriculum, great alignment, a great program or great suggestions that are impossible to do in the hospital. You just know no one is going to have the time or the resources to be able to do it.

In framing the situation as a "disconnect" and a debate, William distinguished a role for himself as an intermediary—a broker and a translator who bridged the disciplinary gap between clinicians and educators:

I hope that I am showing them [medical education people] more respect because I know what they're on about. I mean, I don't think I ever thought this, but other clinicians think 'this is all a bit airy-fairy and theoretical' and 'What would people who've never seen a real patient know'. I am saying the extreme case. That's not what [every clinician] thinks, but in the most extreme case they think that.

Unlike Ruth, however, William did not suggest that this outcome had altered the relationship of mistrust between the disciplines:

I think there will always be this disconnect between what you'd like to do, versus what you can do in a practical sense, in a time sense and in the chaos of a hospital. So even at an individual level there is tension, so it follows that there would be some disconnect.

Where Ruth had tended to portray more expansive conversations on education with at least some clinicians, William tended to limit the altered valuing of education ideas to his actions alone, whereas his fellow clinicians would continue, as they had done before, to see a dissonance between their practices and those of educators.

Probably because I understood where the people who did like [the existing assessment method] were coming from, it helped win that argument because I actually knew what they were talking about. I actually knew.

As other participants noted, William felt that his knowledge of educational terminology, theories and scholarship helped him to feel that he could make a contribution to the strategic work of the curriculum committee. Although he listened to educators, he still emphasised the divide between clinicians and educators and pitted specialists against specialists. He noted that the program had made him more willing to listen to educators' ideas in committees and this, he felt, distinguished him from his disciplinary colleagues.

William acknowledged that, although he fed the debate with evidence of the merits of one form of assessment over another, the battle was not won on the strength of pedagogical ideas alone. William had powerful allies, senior clinicians who rallied to support his case and to maintain the status quo of existing assessment practices. William's participation engaged other clinicians in educational debate and brought them to the committee to thrash out ideas on the educational values relevant to novice students in the profession:

It wasn't just me. I probably did alert the senior clinicians that the [existing assessment method] might go and then they were able to articulate. I kind of mobilised forces to preserve the [assessment].

As with other participants, William's experiences mirrored aspects of both the Kirkpatrick (Kirkpatrick & Kirkpatrick, 2014) and Canberra models (McCormack et

al., 2009). He brought concepts from the program to his education work. Specifically, he incorporated theoretical concepts and used evidence from educational research journals to guide his counsel to committee members and worked to persuade his committee colleagues and senior leaders of the value of his ideas. William spoke more emphatically than other participants about having had an immediate influence upon the decisions of the education committee.

William's actions were a manifestation of what mattered to the specialty clinicians and, to a lesser extent, what mattered to the educators. When the values of the clinicians and the values of the educators seemed opposed in the work of the curriculum committee, William's acted to perpetuate the existing assessment practices of the specialty. The assessment practices of the specialty in the teaching hospital had persisted, overcoming the opposition of the educators in the committee. This further highlights that practices have momentum and that it is easier to perpetuate existing practices than to change them.

William's experiences brought to light an unexpected program outcome—that participants may not always be advocates for change. They may be advocates for the maintenance of the status quo. They often worked to examine the basis of existing actions and sometimes became advocates for the conservation of prevailing practices as a result. Superficially, this advocacy for the status quo may seem at odds with the idea of program impact. In fact, however, it highlights the assumption common to many program evaluations that changes are required to improve the quality of education. These may be changes in the individual or in the whole organisation. This assumption lends itself to a view that change is good in and of itself and that no change is undesirable. William saw educational value in the assessment practices that were going to be lost. His advocacy to maintain this assessment reminds us that UTD program impact can be evaluated in terms of participants' support for educationally effective practices regardless of whether such practices are new or currently in place.

6.5 Summary

UTD program participants' experiences are traditionally evaluated in terms of the impact on the individual-changes in perceptions, knowledge, behaviours and teaching practice. In this chapter, participants' reflections on their experiences indicated that these individual changes occurred and that participants felt these changes had an important and valuable influence on their work. Participants reflected on experiencing personal conceptual shifts post-program, followed by individual critical re-interpretation of existing practices and a desire to use ideas from the program to trigger changes in the existing teaching environment. As Prosser and Trigwell (1997) showed, UTD participants adopt a more student-focused approach to teaching which is associated with more positive and enabling perceptions of their departmental teaching environments. In this study, participants particularly identified feeling that they had ideas that they sought to share with individual colleagues and via committee participation. Post-program, they felt more confident about sharing their curriculum ideas and expressed an increased sense of legitimacy and authority in doing so because their ideas were informed by theory, research and new experiences from the program. They saw their environments as places where they could share ideas by advising others and engaging in education projects, committees, research and scholarship. Two participants also noted that their contributions to education in their departments enhanced their opportunities for promotions.

These observations from participants of their changed actions in and perceptions of their environment are important. As Gibbs (2010) has noted, departments that value teaching by offering teachers opportunities for advancement and where teachers regularly talk about improving learning tend to have a departmental culture that is supportive of quality learning and teaching.

Three particular dimensions of outcomes as described by the Canberra model (McCormack et al., 2009) were apparent in participants' accounts of their postprogram experiences. In the academic citizenship dimension, participants did find themselves becoming a source of curriculum advice to colleagues or providing advice more frequently or in new and more informed ways after the program. In the strategic citizenship dimension, participants also identified that they participated in committees more often or in more informed ways after the program. The impact of the program in these citizenship dimensions was most clearly on the individual program participant. The third dimension, scholarship of teaching and learning, was evident for most participants as they related their new learning and teaching knowledge from the program to their discipline to inform and support their suggestions for changes to curriculum, particularly changes to assessment put forward to education committees. Only one participant (Nicole) noted that she had continued the teaching inquiry projects from the program as formal research disseminated through conference presentations and journal articles.

An examination of participants' experiences of impact through the dimensions of the Canberra framework shows that participants' knowledge and conceptions of teaching and learning became public property in their varied work contexts. Shulman (1993) has argued that an essential element of scholarship is that ideas become "shared, discussed, critiqued, exchanged, built upon" (p.6). Gosling (2006) has related this to how the quality of learning and teaching is improved as individual ideas and practices "can be tested and critiqued in the open forum of public debate" (p. 106). Impact models influenced by Kirkpatrick (Kirkpatrick & Kirkpatrick, 2014) also predict this movement from individual to public as a movement from impact on individuals' enacted knowledge as teaching performance or behaviours to changes in institutional culture and organisational practice (Kreber & Brook, 2001; Barr et al., 2005).

These existing models of impact, however, were not congruent with some of the more challenging and less immediately enabling and positive elements of program impact. The models did not properly address what happened when new ideas are introduced into organisations. In particular, in instances where colleagues contested participants' ideas, the models seemed to overlook the more complex interactions between the program, the participants and the collective practices in their workgroups. At best the existing impact models provided an optimistic explanation of what happens if all goes well and those ideas are accepted, welcomed and acted on.

Acts of contentious resistance abounded in participants' recounting of their postprogram experiences of sharing ideas. Their interactions with colleagues foregrounded elements of what Trowler and Cooper (2002) call the group teaching and learning regime—the "constellation of rules, assumptions, practices and relationships related to teaching and learning" (p. 224). In particular, participants noted that sharing ideas was not always a benign activity. At times these actions ran counter to the established hierarchy of clinical expertise and the hierarchically ordered flow of communication between medical specialties.

The expectation that individual changes in conceptual understanding and behaviours will lead to systemic change across the entire organisation has been criticised by Trowler & Bamber (2005), who argue that it represents how programs are presumed to work when an explicit theory of change is not or cannot be provided by the program. A better explanation of how/why things change is because an alternative arrangement (of how to do things) becomes more sustainable:

By implication, generating more sustainable practices calls for the links and elements of existing, unsustainable practices to be challenged and broken before being replaced and re-made in more sustainable ways. . . . From inside as practitioners resist routines and conventions as they improvise new doings and sayings in new situations. From outside as different practices come into contact with each other. (Hargreaves, 2011, p. 83)

Post-program, participants' actions challenged and sought to break, replace and remake practices from the inside and from the outside. Contentious resistance occurred as the idea-sharing practices that Gibbs (2010) and Gosling (2006) highlighted as important in education came into contact with the established practices of prestige, expertise and deferral to clinical expertise in medicine (Creed et al., 2010; Haidet & Stein, 2006).

Sometimes the impact of the program was a simultaneous perpetuation and variation of workgroup practices which Price, Scheeres and Boud (2009) have articulated as part of the process of remaking existing practices in organisations. When participants worked in environments where sharing ideas about teaching and learning were already a practice of their workgroups, the impact of the program was to strengthen that practice through its perpetuation and variation. Pedagogic inquiry continued to be valued and supported by colleagues. Idea-sharing practices were re-energised as participants examined and translated ideas from the program. A shared spirit of curiosity and experimentation was further fostered among participants and their colleagues. Participants disrupted the routines of 'place' as they became the 'place' for colleagues to discuss teaching and learning ideas, the place to generate new ideas and solve educational issues. Participants resisted the routine of unexamined practices as they felt it was their 'place' on education committees to argue for changes to curriculum more in line with their focus on student learning.

What several participants quickly found, however, was that although they were able to contribute new ideas to conversations with colleagues and on committees, there was no guarantee that those ideas would have a positive impact on colleagues, senior leaders or the existing education practices in their institutions.

At times participants' challenges to colleagues' educational practices became a choice between challenging an existing practice and overstepping the mark. They, and in some instances their close colleagues, saw this as over-reaching their responsibilities and as a direct challenge to the established professional order. Participants' changed interaction challenged others' established ways of working and thus their authority. Unless they were able to change the values and common understandings there would be no agreed need for change. For some, continuing to push for changes in established practices in such a context would have placed them at risk of professional embarrassment as their colleagues would see them as stubborn annoyances at best or impertinent upstarts without respect for wiser colleagues.

Whether the program outcome of strategic citizenship had any impact on other stakeholders, such as colleagues, deans and other education leaders, depended very heavily on existing practices in their workgroups—both the antecedent teaching and learning regimes that Trowler and Cooper (2002) highlighted, but also the interaction between education practices and the particular clinical practices of their medical colleagues. This concept of practices located in workgroups is an important alternative to the idea of overarching organisational culture. Participants' experiences showed that the work of teaching involves much more than classroom or bedside teaching interactions between student and teacher.

Teaching in higher education and medicine commonly encompasses educational development, scholarship and research work that is often undertaken outside the classroom. This involved participants in the practices of different workgroups, such

as those among their most immediate colleagues in their unit, those in the teaching hospital more broadly and those in their specialty associations. To unravel this more thoroughly we need to go beyond the standard models of impact and look to theoretical constructs that enable us to understand how practice, as a collective entity, bridges individual actions and organisational culture.

Chapter 7

Interaction with the Professions

The outcomes of UTD programs cannot simply be evaluated in terms of short-term impact on individual participants but must be seen in terms of the professional context in which they are embedded before and after the program and in which they must continue to function (Kreber & Brook, 2001; McCormack et al., 2009). Through their experience of the program, several participants came to see education as a legitimate professional practice. This was an important factor in their belief that they could make an impact after they had completed the program. The central concern in this chapter is how participants positioned their new-found sense of education as an independent and valuable pursuit within their broader professional context. These interactions with the professions of medicine and education constitute a crucial element in evaluating post-program impact.

The relationships described by participants between their professional and personal identities and the values and practices of the organisations and groups to which they belonged did not involve simple interactions with readily identifiable pathways of cause and effect. They were complex, dynamic and difficult to explicate for both interviewer and interviewee. In these interviews, identity emerged as a shifting entity for the participants, as they reconstructed their sense of belonging according to the situation and context in which they found themselves at the time.

Some participants observed that the program had helped them to formulate an identity as an educator—to see themselves as part of the education profession and, indeed, to see education as a profession in the first place. This was a catalyst for them to feel that they could change not just their own actions but also those of the profession. This can in part be explained by practice theory in terms of the interactivity of individual and organisational identities and of individual and organisational practices.

In interviews, these complex interactions clustered around four main themes. The first theme emerged from participants' accounts of the pre-existing collective view of education in their work environments and what this had meant to their early teaching

work (that is, their post-program reflections on their pre-program professional environments). The second theme captures changes in participants' understanding of themselves as educators, which developed as they came to see education as a legitimate and worthwhile practice that was open to them. The third theme reflects the growth in engagement with formal qualifications in participants' working environments and how this, alongside their developing sense of identity as an educator and medical specialist, helped to develop their sense of belonging to a profession. The fourth theme represents the contrasting experiences of two participants who disengaged from education, which they continued to see as an activity that was an adjunct to their practice as medical professionals.

7.1 Changes in the Status of Education within the Organisation and Profession

Several participants from teaching hospitals spoke of an earlier (pre-program) working history where teaching had been dismissed or neglected by their professions. They reported that the medical profession in general, and specialist clinicians in particular, accorded lower value to teaching medicine than to practising or researching it. This reflects a more widespread process of an organised hierarchy in which certain occupations are accorded higher prestige than others (Hoyle, 2001).

Ruth, William and Baden reflected on the specific elements of practices that had contributed to the undervaluing of teaching. They noted that their colleagues saw teaching as an ancillary activity, something which junior doctors were commonly required to do during their training but which was expected to have little to no bearing on their own career paths in medicine. As a result, preparation or training in teaching was seen as largely unnecessary, thus perpetuating the view that teaching was a run-of-the-mill task of a lower order of importance than specialty clinical skills.

Ruth's story portrayed a widespread understanding of teaching as the straightforward performance, observation and replication of clinical skills and procedures. Learning was similarly understood to occur through observation and the faithful replication of what had been observed. Education was seen as a "soft subject" by her fellow clinicians:

I think clinicians for a long, long while have just thought that it's 'see one, do one, teach one'. That's the saying . . . It's a matter of just getting in there, talking to patients, doing it and getting on with it.

While this replicative model remained uncontested, there was no perceived need for clinicians to question or to seek a different understanding of teaching and learning:

No one really understood how they were teaching. They were just saying you had to do it.

William made a similar point:

You don't understand what's good, what's not good, what you are doing well, what you are not doing well, how you could do better.

He emphasised that, without an understanding of pedagogy, it was difficult for educators to judge the quality of their teaching or know how to further their interest in developing their teaching.

Often, the more junior doctors were loaded with the teaching of medical students in teaching hospitals. Reinforcing Ruth's characterisation of teaching as receiving little attention or professional standing in medicine, Baden, recalled that he and his fellow trainees had been given a heavy teaching load leading into the later years of training in their specialty:

Up to that point you're very much based in tertiary teaching hospitals and most people at that level, by the nature of their job, do a lot of teaching.

Although teaching was a commonplace expectation, particularly of the more junior doctors, Baden and Ruth highlighted that skill, experience, knowledge or preparation for teaching was not explicitly seen as necessary precursors for teaching. William corroborated this view, stating that he initially took on his teaching responsibilities at a time when teaching was understood as an innate capability, coming from an individual's "gut instinct" and was usually undertaken from a "very low base" of knowledge about education:

I am from an era that did not get anything taught about how to be good teachers. We really didn't. Nothing. No theoretical basis. Nothing. I was a wave that missed all that.

William characterised this lack of attention to teaching as a long-standing absence. Having the necessary clinical skills was seen as a requisite precursor to acting as a clinical teacher; teaching skills were simply not recognised as a requirement at the time.

William also identified a more actively antagonistic attitude to medical education among his colleagues. Time spent on teaching was perceived as an unwelcome responsibility and a distraction from the profession of medicine. He observed that this was not how he felt and noted that his students had recognised this, stating that he had won the bedside teaching award, as judged by students, for the last "six or seven years in a row".

I think that just had to do with enthusiasm really. There probably isn't much competition, at least on the enthusiasm stakes, among the clinicians like me. So I don't think it actually reflects that I was a great teacher. . . . After all you only have to be enthusiastic and you're already ahead of all the others who see the students as a pain.

William downplayed the significance of his awards in teaching, expressing scepticism over whether the awards could have been considered a bona fide measure of his teaching quality. Rather, he felt that it reflected more on the existing situation in which most clinicians were expected to teach but did so with little or no enthusiasm for their work and treated students poorly, as though they were an interruption to their work.

It was unusual for senior clinicians in the teaching hospitals to continue their involvement in teaching. Baden recalled being aware of particular clinicians with a reputation for being good educators but he characterised these as atypical cases:

Like I was aware that there were professors in ivory towers that were designing curriculum, and I was certainly aware that there were very charismatic teachers on the floor in different places and with their own suite of influences, but I didn't really know where to go to kind of start developing that for myself.

Even though Baden recalled having wanted to progress his interests in teaching, as a trainee he did not identify with those senior staff as role models. He saw them as

distant professors working on curriculum in privileged seclusion or as exceptional clinician-teachers with exclusive circles of interests. Baden's characterisation highlighted the remoteness he had felt between himself and the mysterious domain of seasoned educators.

As a young trainee, Baden saw a career path in education as uncharted territory. He highlighted trainees' lack of understanding of education as a vocational opportunity in medicine:

I was finishing off my advanced training, and I think that's a very changeable time for people on a [Specialty B] career track. After you've finished your advanced training a majority of people would go into private practice medicine.

Baden portrayed teaching as a stage clinicians passed through on a one-way journey to becoming a specialist in private practice. Elsewhere in the conversation, he noted that once these clinicians were done with their advanced training stage, most would "never really look back" (i.e. they would not return to teaching) and "only a small percentage become academics". He recognised that, prior to the program, he and his colleagues had operated as though teaching would be a transient episode in their careers, ancillary to their main profession.

This issue of status is important because those who are in the process of reconstructing their sense of belonging are contemplating a downward shift in status. Becoming a dual-professional is potentially deleterious to their social position, given the workgroups and professions of which they are a part. When they did change their status, however, they also enhanced the standing and raised the profile of the education profession among their colleagues and workgroups.

The low status of teaching was not simply a characteristic of the teaching environment of institutions such as teaching hospitals. When Gibbs (2010), in accordance with the Prosser and Trigwell model (2006), spoke of the importance of valuing teaching, he characterised it as an aspect of local, departmental cultures engaged in quality learning and teaching. In contrast, Baden, William, Ruth and Nicole's reflections highlighted that status is a social phenomenon maintained by the profession of medicine and carried out as a practice in particular ways by disciplinary specialists. The profession, particularly in its ways of training and accrediting members, placed teaching lower than medicine down the hierarchy of occupational prestige (Hoyle, 2001).

One way in which this hierarchy was maintained was through the specialty disciplines' categorisation of teaching as an activity in contrast to medicine as a career. This differential occupational status (Hoyle, 2001) cast teaching as an ancillary pursuit, something done by junior staff and an annoyance to senior clinicians and, therefore, in a separate category to the serious work of medicine. The social status of teaching is missing, or at least hidden, in conceptions of context in the Prosser and Trigwell (2006) model of university teachers, but has particular salience for these participants working in university and medical environments. Although the reflections by Ruth, William and Baden did illuminate what is labelled as the teaching environment in the Prosser and Trigwell model, their reflections also spoke of something different—an overarching social order maintained in the practice of medicine.

7.2 Changed Sense of Self as Educator in a Legitimate Endeavour

Often the process of becoming a professional medical educator involved working against the grain of practice. Some of the clinical educators spoke of the impact of the program in terms of the way it helped them open up spaces for a different process of formation as a dual professional—a medical specialist and medical specialist in medical education. Many times, however, they felt that they were working counter to the existing pattern of practice. They were seeking to become medical education professionals, but doing so in an environment in which there was no general understanding that medical education was a profession or where it was, at best, downplayed.

Baden and William described the poor learning and teaching environments in teaching hospitals they remembered as junior trainees and the negative attitudes towards teaching and learning in the medical profession, which was particularly acute in the teaching hospitals. There the primary focus was on the acquisition of clinical skills and rapid progression towards a medical specialty and private practice; the need for and desirability of teaching development was given little weight. Continuing in education was seen as an unusual choice and one which they would need to pursue as an individual interest, since there seemed to be little formal support for it within their working environments.

This is illustrated in Baden's story about how his sense of belonging was reconstructed during his shift from junior doctor at the start of the program to clinical educator by the end. Baden characterised the Masters program as a place set apart from his clinical responsibilities where he could "explore" the uncharted territory of an education career:

I had this recognition that the thing that I would miss the most from the tertiary hospital environment was the education aspect—the direct face-to-face teaching and taking people on bedside rounds and small-group teaching. And so I think the Masters was an ideal sort of haven for me to start to explore those things.

His description of the Masters program as a "haven" contrasted with his former uncertainty about pursuing his education interests as a career:

I knew that I wanted to go down [a medical education] track, but I didn't know whether there would be an opportunity.

Baden described how it was a common expectation of the profession that junior doctors in a teaching hospital would do some teaching of medical students as a way of giving back to the profession. Continuing to work in medical education, beyond the requisite period of what Baden described as a doctor's duty to the profession, was seen as a choice outside of the usual professional order in medicine. It was an idiosyncratic aspiration. Baden spoke of how the course helped him to crystallise his thoughts of building a profession in medical education. The choice of what he saw as an alternative professional track, however, meant a degree of uncertainty in his practice:

It relied on the right job coming up at the right time. . . . Otherwise I could easily have started this out of interest but then quickly become a private practice specialist and never really looked back—as I think most people with PhDs or other higher training do. They don't really go back to their research tracks, and it's probably a small percentage that become academics.

As an idiosyncratic aspiration, continuing to work in education was reliant on a bespoke network of collegial support. Support from colleagues who validated his interest in education as a legitimate career direction helped to generate a coherent professional "track" from the hazy path of aspiration:

I was lucky. The right job did come up—as a clinical superintendent at the hospital. That job came up because people had recognised that I had an interest in education. The Masters differentiated me from other candidates. So it all fell into place.

For Baden being "lucky" manifested itself in the form of an opportunity for professional progression which grew from the understanding among influential colleagues that a formal qualification created a point of differentiation in Baden's career and allowed them to support his determination to be an educator. With his colleagues' support and his own interest and qualifications in medical education, Baden has continued to maintain a bi-professional identity within the hospital both as a Director of Clinical Education and as a medical specialist. This dual professional path represented a sharp contrast with his characterisation of his colleagues' attitudes when he was a trainee, when education was seen as a temporary diversion that would not be allowed to get in the way of the main pursuit—private practice specialisation.

In reading Baden's story as a text, what he characterised as serendipity can be understood through the lens of practice theory as a temporal alignment between changing sense of self (Lave, 1996) and changing practices, or elements of practices, within the workgroup (Schatzki, 2002). He became involved with his colleagues (and the workgroups they constituted) in a mutual reconstruction of the practices around being a medical educator. This allowed him to enter into the profession in a way that was consistent with his newfound understanding of education as an independent professional track. This illustrates Schatzki's (1997) idea of "contingent and shifting relations among social phenomena" (p. 284) as we consider the practice of medical education as a social phenomenon, rather than looking only at the gaze of the individual.

Not all program participants were clinical educators. Tara, as the single participant without a medical background, experienced a different shift in her work. Before continuing with the stories of the clinical educators, I examine Tara's experiences as a counterpoint. Post-program, she had moved from a research-focused role to a more

teaching-focused academic position. As such, she did not have to deal with the tension of a bi-professional identity between medical specialist and medical educator. She had a more unified sense of herself as an educator.

Like the clinical educators, Tara recalled that she had seen education as an activity she had done as an adjunct to her main occupation, stating that she had earlier felt she was a "working professional" who was "maybe doing a bit of education on the side". Underlying that comment was the notion that a role in education was something that people stepped into with minimal prior experience or preparation, even within a university department.

She recalled the moment when "all of a sudden" she recognised her location within the medical education profession:

I'd been working in medical education, sort of unbeknownst to me, since probably 2002/2003 on a part time basis. I started this program five years after I really started in that field. It just all of a sudden made me realise there is actually a framework where I can hang everything I've been working on for these five years. I wasn't aware of that before. I think that's really what it did for me, just sort of put everything into place.

Tara reflected on having discovered in the program that her interest and experience in medical education represented a consistent and legitimate career path. Postprogram, Tara portrayed medical education as a substantive practice, a professional "framework" within which she could position her work in education. It was a place to "hang" her experience and knowledge, to put these "into place":

I definitely think about myself as a medical educator now, I didn't before [the program]. I would never even have identified myself as such. . . . Colleagues here saw me developing through the entire course. They probably would say I have a better handle on things now and I probably seem more confident. . . . But I really don't feel that their perceptions towards me have sort of changed at all.

Tara reflected on having discovered in the program that her interest and experience in medical education represented a consistent and legitimate career path. Unlike the clinical educators, however, there was not the same sense that self-identification as an educator was an unorthodox, idiosyncratic path obscured by the more dominant, prestigious and well-worn pathways to medical specialty professions. For Tara, the professional community was guided by particular constructs to effect change. Shared constructs such as the model of constructive alignment, a curriculum design matrix, and knowledge of variety in modes of assessment, were the ways through which education was given its legitimacy and the ways through which educators facilitated change. An effect of the program was a sense of legitimacy for participants' interest and actions in education. Tara depicted this as a "sense of belonging" to a singular profession and a "validation" of experience:

It is like having more of that sense of belonging. I can relate a bit better to the work that I do. I can engage with it on a deeper level in a way that I couldn't before. It validates my interests in terms of the career I was looking for. It validates the strengths that I could bring to it in a way that I really didn't feel like I had before. I just felt like I knew absolutely nothing and was always flying by the seat of my pants.

Tara was located within a university medical education department. This was a workgroup where an interest in education was central to the practices of the group, whereas the clinical educators, located in a teaching hospital, belonged to workgroups who had historically seen an interest in education as an activity outside the practices inherent to the group.

For the clinical educators, developing a bi-professional identity as a legitimate end was aided by a few senior leaders who showed that no harm would come to those who pursued such an end. As Baden identified, an impact of the program was that local colleagues would assist and support entry-level bi-professionalism, even when they themselves had not continued as educators. Some participants were embedded in workgroups where they had colleagues who not only supported but also modelled progression as a dual professional.

An example of this is William's account of how progression in medical education became open to him post-program. He identified that a supportive microclimate for continued professional progression in medical education at the local level was fostered through the collective actions of individuals in positions of influence. William felt that his own education work was supported because the departmental senior leaders had a background in education and therefore had a greater understanding of his own work and interest in education. Our Head of Academic Department is a real high flyer with research and he was one of the real drivers of the new [University] medical program. Somewhere along the line he decided [medical education] was not for him, but he understands it and I think he would understand some else's interest in it. He did his time. So I do feel supported. When we win awards he's always chuffed and he knows it's good for our department.

Active support of junior colleagues' promotion by senior managers was important for the retention and progression of educators. William noted that focusing on education could have jeopardised his chances for promotion, were it not for the support of his local leadership:

The thrust of my argument for promotion . . . was what I've worked on in education—the committees I was involved with and doing this course. I really emphasised that. I know [the Head of Department] had to go in and bat for me. The head of our clinical school also knows about the teaching I do and that I'm a keen teacher, so I am sure he would have said that in the interview. The head of the clinical school's support is paramount. If he's not supporting you—well, you probably wouldn't even go to promotion, you wouldn't even get to step one.

William was successful in his application for promotion post-program. His experiences showed that the practices within his workgroup were evolving in such a way that they sustained the value and legitimacy of working in education.

If we analyse the stories of Baden, Tara and William only in terms of individual experiences of change from participation in the program, we fail to recognise the impact of broader contextual social factors on their ability to effectively pursue their goals. Nor can we simply see this in terms of a stable context shaping and directing their trajectories. Their stories can only be fully understood in terms of the interactivity between changing individual identities, values and practices and the changing identity, values and practices of their workgroups. Participants also spoke about how they saw their own value within education differently than they had before the program. The impact of the program was evident in how they felt they were now legitimately participating in the profession of medical education but, in doing so, they also created and sustained the recognition of medical education as a valid profession.

7.3 Growing Engagement in Formal Qualifications in Education

The program conferred a formal educational qualification, which participants felt justified their continued growth in education to themselves and others and helped them to rationalise medical education as a professional pursuit to colleagues. With the formal qualification, what could have been a professional tangent was now a distinctive facet of their professional identity. The clinical educators (Baden, William, Ruth and Nicole) each spoke of the program as a qualification that unlocked a developmental gateway for them and, over time, for other colleagues as well.

Further professional development in medical education was once a rare occurrence and a questionable diversion from the clear path to medical specialisation. Ruth and Nicole identified that, in the time since they had completed the program, participation in professional development in teaching and education had become more prevalent in their teaching hospitals. Ruth noted this change in relation to one of the more senior clinicians:

One of the discipline academic supervisors in medicine is actually doing a Masters in medical education as well.

She also noted that there had been an increase in the number of *in situ* short courses or local customised professional development opportunities, such as the train-the-trainer model of Teaching on the Run workshops in clinical teaching (Lake, 2004):

In the last 12 months they've been starting to do Teaching on the Run within the hospital.

Similarly, Nicole commented that she had been the first person in her unit to complete further study in medical education but she offered a more specific reflection on program impact as a transformative modelling of new possibilities. Through her actions, she had substantiated the legitimacy of professional growth and development in medical education to her colleagues, and others had followed her lead:

No one else has yet finished their Masters of medical education but a couple of people have started, so it's something that's followed on. I'd like to think that I've modelled that further education in medical education is an appropriate path.

William predicted a more global change across the medical profession. He likened the growth of theory-informed teaching to the growth in understanding of evidencebased medicine (EBM) throughout hospitals:

In 1996, you could have gone round the hospitals and used the acronym EBM and a lot of people would not have known what it meant. That's unimaginable now in a hospital [and] the students now all know about it.

In drawing this comparison between EBM and theory-informed teaching, he highlighted what he saw as a shift away from instinct-based teaching (where he was when he had begun teaching) towards scholarly teaching informed by both theory and evidence (where he felt he was at the end of the program) as a widespread movement in medicine. He forecast that, as more clinicians gained further qualification in education, colleagues and students would be exposed to their new pedagogic ideas and practices. To some extent he saw this change occurring in the present, noting the existence of "more people who know (about education)", adding however that he, as with most clinicians, began teaching from a "very low base" of education.

Like Nicole and William, Tara observed that education had a legitimate status which she located within a conceptual framework manifest in the language, actions, skills, tools and experiences of medical educators:

Not just extra letters behind my name but that I had tangible skills and concepts. Tools that I could take away, apply in my work. . . . I mean the theory but I also mean specific tools like how to design a curriculum matrix and what the different types of assessment that you can use are, the concepts of constructive alignment and that type of thing. There are major core concepts that provided the foundation of a lot of what we learned in that entire course. That's really what I mean by the core framework.

This validation occurred in part through a confirmation of shared group practices. As Tara expressed this, colleagues shared a vocabulary, a "language", and an "industry":

There is a lexicon now that you build up as a result of this program . . . , a common language that I now feel like I have with colleagues and with other people in this industry that I certainly would not have had before.

The 'doings' and 'sayings' of teaching were shifting. Earlier discourses had characterised teaching as a fixed obligation, of limited professional value in the trainee's formation as a medical specialist. This was being gradually replaced by discourses emphasising the improvement of teaching. Ruth described changes in the elements of clinical teaching practices in her workplace. She noted a shift away from the general understanding of teaching as the perfunctory duty-bound event she had identified earlier. Ruth spoke of shifts in teaching practices in her workplace that incorporated the emergence of a new general understanding that improving teaching would improve learning:

Over the last 12-18 months it's really started to change. Some of the clinical rotations are excellent now and it's beginning to be understood that you really should have some teaching skills if you're going to be teaching both junior doctors and medical students. It's just something that seems to be becoming more accepted.

Omera and Ruth both sounded notes of caution against adopting an overly optimistic view of the impact that the growth in formal education qualification would have in the professions of education and medicine. Omera, as a lecturer within a university medical faculty, questioned the sudden proliferation of Masters degrees in medical education among some of her colleagues and warned against equating qualifications with competence:

We have two other people who got degrees from universities in my country. But I don't know how those universities can offer the degree. There are no experts in medical education there. The degree was just offered following some workshops in medical education, then they asked the participants to do a paper and then they offer the degree.

Omera raised the issue of the trustworthiness and value of the qualification. Nonetheless, despite her scepticism about the value of some of her colleagues' qualifications in medical education, she spoke more positively about the legitimate growth of qualified educators:

In [the city] they now have a course for master of medical education. There they have three staff with PhDs in medical education and some with Masters. Also one of my colleagues is doing her Masters of Medical Education by distance learning from [an overseas university].

Ruth held two concurrent part-time roles as a private practice clinician and as a medical educator in the teaching hospital. Although she depicted both as legitimate professional paths, she warned that education was a less competitive pathway in financial terms. In her view, medical education could not be an exclusive full-time career choice for her and others with medical qualifications:

The problem with being an educator at the university is you get paid very, very, very poorly. . . . Although I'd love to do this [educator work] full time I'm still supporting children at uni. If I gave up any clinical work then I would be really struggling to support my two kids.

She noted that the education role was much more demanding than the official designation of a 'half-time' load suggested. She also felt it was comparatively poorly paid, noting that her education work attracted less than one-third the salary of private practice medicine. This compounded her sense of the inadequacy of the reward for her education role and she hinted at the possibility of burnout when she contrasted her "love" for the education work versus what she felt was the right thing to do to fulfil her family responsibilities. She realised that the discrepancy in workload and remuneration was a stark and pragmatic check on her working life. She saw the discrepancy as an important obstacle to the retention of educators in medicine which the qualification provided by the program had not yet alleviated or solved.

Baden positioned himself among what he saw as a large collective of people using "theory" and "literature" in their education work. He saw himself as a part of network of practitioners who were "questioning" and "refining" the way education was done and the values they hold. He accorded value to thinking "differently" and questioning the values and aims of education:

The program has given me awareness that there are a great number of people out there who think differently. They're using psychology, education and learning theory and there is a body of literature which tries to address [questions such as] what is the best way to educate people; what should our values be; what are we really aiming for? To me, that kind of questioning has opened up huge doors in terms of how I'm seeking to go ahead and refining the way I think about education and what our final product should look like. It has been really useful in terms of opening my questioning about my own performance and ways to improve it, as well as how the world works. It's opened a lot of doors.

Baden suggested that, even though his post-program education work had sometimes involved questioning accepted values and practices, it was a valid and important means of contributing to society:

It [the program] has changed the ways in which I think about interventions that I could do. Whereas before I would have thought clinical, I think about educational projects. So it's changed the way that I view how you can contribute and the way in which society is ordered. So there are wider ramifications than strictly the career. How I see the world has changed because of the Masters and the way that I look at education. I think about politics much more than I used to, in terms of how money is spent on education or not, and what the educational agendas of government are.

The Prosser and Trigwell (2006) model anticipates that participants' perceptions of their teaching environment are related to their perceptions of learning and teaching. Participants' recollections echoed this view to a certain extent. After the program, they began to see new educational opportunities in their environments—more opportunities to interact with colleagues on education-focused activities and to speak with colleagues about matters related to learning and teaching. They sensed that teaching was becoming valued as other colleagues took part in various UTD programs to prepare for their teaching roles.

These interactions sit within the community and institutional microsystems outlined by Biggs (1993), or what Roxå and Mårtensson (2015) have characterised as the macro level of impact. Impact at this level manifested itself in complex and subtle ways, most involving a shift in identity in terms of either participants' perceptions of themselves or of the disciplines and groups of which they were a part. Participants were able to pursue professional paths they previously thought were not available to them or simply had not been aware of, build networks outside their own organisations, align themselves with a new disciplinary focus, build a new dual disciplinary identity or simply open a dialogue with groups with whom they had previously not shared a vocabulary.

7.4 Disengaging from the Profession

Not all clinical educators spoke of a reconstructed bi-professional identity after the program. Paul and Tracy portrayed their participation in medical education as more

limited and less transformative than others had. Although both had continued to teach after the program, they felt they had had limited opportunities (Paul) or motivation (Tracy) to develop further as educators.

Tracy began the program during a period of intense work as a medical educator for a private registered training provider while also working as a clinician. Mid-way through the program, however, she left her education post, feeling disillusioned and exhausted by the demands of managing the competing workloads of medical educator and clinician:

I stopped being a medical educator and was reasonably burnt out in that position. I think that contributed to the loss of motivation quite significantly. I thought the program would open a few more possibilities for me about what I might choose to do down the track if I didn't want to be in clinical work any more. But I don't think it has.

When Tracy left her medical education post she continued working as a clinician and began teaching medical students in a private practice clinic. Although she had continued to teach, she had not developed a dual-professional identity, as had the other clinical educators. She identified as a doctor who taught, considering her teaching simply as an activity that was an adjunct to her profession as a clinician.

Paul portrayed himself as somewhat separate from the medical education "community". Recalling a national medical education conference he had recently attended "out of interest", he spoke with some wonderment at the "enthusiasm" of educators. He identified the attendees as a "community of educators" but observed this community in a somewhat detached fashion. He admired the collective "positive" energy they had for their work, for students and in their interactions with one another. He felt that as a result of the program he too was more enthusiastic about teaching and he spoke of getting "caught up in" and being overwhelmed by the enthusiasm of the educators at the conference. He observed the actions of a community of which he was not fully a member:

One unexpected thing is the enthusiasm that medical educators have for teaching, which I kind of got caught up in, rather than just being seen as a necessary evil – 'oh, medical students coming in again'. I went to the [medical education] conference and some of the presentations were very interesting, but more I was just overwhelmed by the enthusiasm of everybody for their work.

Part of his wonderment at the zeal of medical educators was that he saw teaching as an act of volunteerism. Where Baden and Ruth had depicted education as a dual, complementary but distinct profession:

All of these people, they are primarily clinicians and they are teaching in their spare time. But they were just so enthused about teaching students and junior colleagues. That community of educators – I found it a much more positive group than, for example, a community of [medical specialists].

He depicted teaching as a sideline to the main profession of medicine, with most of those involved in medical education doing it as a voluntary activity in their "spare time". Paul volunteered his time to an overseas charity organisation as a specialist medical consultant. In this sense his "spare time" was taken up with volunteer work in his medical specialty, which distinguished him further from the medical education community's "spare time" teaching activities.

Paul spoke of a change within himself in that he now felt that he identified with the educational intentions of medical "teachers". As a clinician, he was more receptive to learning opportunities:

I think the course has opened up more of a community of teachers—partially . . . Now I'm a bit more receptive to other people's innovations. For example at [the teaching hospital] with improving handovers—I had always been anti-teaching at handover. That's the last thing I wanted to do, 'Let's just get on with the job!' But now I can see the importance of that a lot more, and actually appreciate it and enjoy that side of things. When other people are making changes like that, I'm more receptive and probably more aware of the changes that need to be made as well.

Although Paul spoke in the interview of seeing medical educators as a "community of teachers", he credited himself with only partial membership. His qualified selfidentification with other teachers arose from his sense of a diminished connection with teaching in his work over time. Paul, like Baden, reported that he had begun the program during a time in his medical career when the hospital expected that he would undertake teaching as part of his path to qualifying as a specialist. Unlike Baden, however, Paul felt that his time in the teaching hospital was temporary. He completed his specialty training, left the teaching hospital and took up another temporary position in a community health service where he had no further teaching responsibilities. When he recalled developing plans for new learning and assessment activities during the program, he reported they had "all sounded good in theory" but were not worth the effort that would have been needed to see through their implementation. He felt the temporary nature of his posting had left him without the influence and trust of colleagues that was necessary to implement changes. Change, Paul felt, needed influential locals "to come from the inside, and get to know the people and get to know the particular problems".

He engaged in a small amount of teaching after the program (running workshops for his professional association) but contended that he had no leverage for change or innovation since the workshops were taught in "quite a fixed way" with "no flexibility for designing your own approach". With a diminished teaching role, he was hesitant to identify himself fully with the community.

Post-program, these two participants moved into positions focused increasingly on medicine and medical practice and, as a consequence, disengaged from their sense of self as a member of the profession of education. They formulated their identities as clinicians who did some teaching but they were not actively involved in the educational development activities that the Canberra model (McCormack et al., 2009) suggested program participants would be able to influence. They had a limited sense of engagement with issues of pedagogy or curriculum and no sense of contribution to the wider community of medical education.

It was possible for them to continue in that way but, in terms of impact of the program, they changed little in their own practice and had little influence on other possible stakeholders such as colleagues or senior leaders. In this sense, Tracy and Paul perpetuated the shared practical understandings focused on know-how of teaching but they had few interactions through which they would be reconstructing, negotiating or contesting existing educational practices. This highlighted again the reciprocal interplay between individual identities, values and practices and the identity, values and practices of the workgroup. Although a more expansive sense of reciprocal growth and development had been evident among the other clinical educators (Baden, William, Ruth and Nicole), Tracy's and Paul's experiences suggested that a persisting view of medical education only in terms of teaching and

as an ancillary activity to one's main profession could inhibit the broader development of the professional and the profession (Boud & Hagar, 2012).

7.5 Summary

Participants reflected on how the program had helped them self-identify as education professionals and develop a sense of themselves as educators. Some participants also reflected that the status of education in the medical profession had shifted since they began the program, moving away from the practices they inherited when they first started teaching. As described particularly by Baden, William and Ruth, the inherited ways of practising teaching were often the restricted forms of practice described by Boud and Hagar (2012):

Some forms of practice are likely to be so circumscribed and limited that continuing engagement in them alone will inhibit the broader development of the professional (p. 27)

Participation in the program prompted participants to broaden the scope of practice. Their participation was a site in which they explored and extended the meaning of teaching from a simple repetitive activity to a professional practice. This construction or, more aptly, this re-construction of practice, implicated the shifting coconstruction of the participants' professional identity as medical educators (Boud & Hagar, 2012). Their participation introduced them to the idea of medical education as a distinct discipline with its own legitimacy, values, logics, priorities and language. The idea of medical education as a discipline became an enabler, allowing participants the freedom and, at times, the authority to pursue change on a larger scale than merely within their own teaching. This idea resonated with different participants in different ways. For some it provided a framework and vocabulary to articulate ideas they already had about the institutions of which they were a part, the programs in which they worked or how they (or others in their specialty) interacted with students. They spoke of the program as having been an avenue for them to explore their own particular interests in education, especially while working in environments in which an interest in education was seen by colleagues as obscure and uncommon, or even unnecessary and undesirable. For others, it caused them to rethink their professional beliefs-no longer seeing themselves as following a

predetermined path in a homogenous environment but seeing options and choices in a complex world of sometimes competing and sometimes collaborating disciplines.

Pre-program they were unaware of or unclear about the existence of a professional path in medical education. The program helped them to recognise and participate in medical education as a profession and, in that recognition, they themselves had helped to elevate the profession. Seeing education as a legitimate career path also changed individuals' perceptions of their workplace and their position in that workplace. They saw further opportunities to pursue their education interests, from a career perspective. They also saw their workplace as a more interesting and diverse environment that afforded more avenues to effect change.

Those who persisted in self-identifying and practising as educators highlighted that education now had a legitimate status. They identified local ways in which education could be supported in their department. They acknowledged the colleagues who recognised and supported their interest in education and the colleagues (albeit distant colleagues) who had successfully pursued education interests within a medical career. They also identified that the legitimacy of education was more than the opportunity to support a career in medicine and education. Some spoke more abstractly of this than others. Baden, for example, emphasised how actors in wider society sustained the legitimacy of education. He recognised and felt connected to a professional community in education that was external to medicine. The focus of this professional community was to examine existing practices, question existing values and in this way sustain a different worldview and make a contribution to the profession of medical education and society more widely.

Participants saw medical education as having its own community they could draw on for discussion, support, collaboration and the development of new projects. In some instances they saw themselves as foundation members of this community within their contexts with other colleagues joining them over time. Other participants felt the program had given them entry into an existing community in which they could now participate.

Recognising medical education as a distinct and identifiable discipline enabled people to have expertise in the area separate to their expertise in medicine. This gave them credibility in promoting change in their area and gave medical education an intrinsic value that made it worth changing. Often participants saw a growing but not yet fully matured awareness of this amongst their colleagues but saw a role for themselves in promoting and encouraging this awareness.

For two participants, Paul and Tracy, their teaching work had not grown or diversified after the program, to the same extent as the other participants. Paul continued to see education as an adjunct to his main medical occupation, even several years after the program. He felt that the program had helped him to become enthusiastic about others' education projects and plans for innovation but he had no plans for developing such projects himself or continuing with the plans for change he had developed in the program. He was tentative with his identification of medical education as a distinct occupation and tentative about his affiliation with the profession. Similarly, Tracy had reduced her education work midway through the program and by the end of the program identified education as an ancillary activity to her clinical work. Without both the self-identification and the supporting identification of key colleagues, they had tended to disengage from the profession post-program. This shows that participants whose accounts suggested consciousness of the effects of the program were the educators who persisted in self-identifying and practising as educators and had key surrounding people who supported education as a practice.

The degree to which the impacts of the program could manifest themselves was also influenced in part by the degree to which participants identified themselves as members of the educational profession and identified education as a legitimate profession. In identifying themselves as educators, and acting as though education is a legitimate profession, they in turn influenced the status of both themselves and the profession of education within their organisations. This in turn affected the attitudes and behaviours of others within the organisation and may have changed institutional or organisational practices. In turn changes in attitudes from others and changes in institutional practices may further impact upon the way participants identified themselves as part of the discipline of education.

Understandings of how and why they did this emerged most readily from a practice theory approach as their sense of disciplinary and professional self was embodied in the practices they adopted and promoted. This shift in discipline necessitated a change in practices. However a change in practices will also drive a shift in discipline and the interweaving of the two is a key element of the accounts of participants, with some adopting the identity of educator and then modifying their practices accordingly and others changing what they did and said and finding that lead to a greater emphasis on the idea of educator in their identity.

Further understandings of the impetus for these shifts seems to be grounded in that space Schatzki (1997) describes as teleoaffective, with participants' accounts incorporating senses of purpose, comfort, belonging and luck. Schatzki argues that individuals perpetuate practices while they operate within them and that both operating within practices and perpetuating or re-creating them happens through individuals doing what it makes sense for them to do. Following the program, what it made sense for some of the participants to do changed and this in turn had an impact, in some instances, on the organisations and groups of which they were a part, changing what it made sense for others to do as well.

Chapter 8

Discussion

This study addressed the question: What is the long-term contextual teaching and learning impact of a UTD program in medical education? The main finding was that this UTD program did not just have an impact on individuals' knowledge of teaching and what they do in the classroom. The experiences of participants showed that, to be truly effective, a UTD program evaluation should go even further and address what is done outside the classroom to create departmental environments conducive to improvement of teaching, in its broadest sense, as improvement of educational practices. This study suggests a new lexicon in evaluation could be valuable, one focused on educational practices as inclusive of all education work, not just individual teachers teaching in classrooms.

This study has shown that understanding the impact of a UTD program requires investigation over time, not just at the point of graduation. It also requires an interpretation of long-term impact through shifts in educational practice within organisations, not simply changes in individual attitudes and approaches. The hermeneutic dialogue of reflection on experiences and texts as used in this study highlighted the importance of understanding practices and, thus, shifts in practices as social phenomena that are embedded in and emerge from the interactions between participants and those around them.

The UTD program affected individual participants by engendering within them a more critical stance to teaching, curriculum development and the education profession. The program disrupted the cycle of continuing to teach as they had been taught as undergraduate students, enabling them to see teaching from a broader perspective of enacting education both as a practice and a professional pathway in which development is encouraged and innovation and change are openly discussed. However, this study highlighted that to effect change, even in their own practice, most participants had to engage with the normative beliefs and practices in their department or organisation.

To effect change in collective education practices, they needed to engage directly with colleagues and organisational structures. These interactions shaped participants' actions and, to some extent, determined what participants could and could not do. At the same time, these interactions also shaped their organisations and helped to determine what was and what was not acceptable. A few participants experienced education work as teaching that occurred only in environments (such as a classroom, ward or hospital bedside) where they were solely responsible for determining the curriculum. For most, however, this represented only part of the meaning of their post-UTD experiences as educators.

While it is important to look at the effects of a UTD program on what the individual participant says, knows and does, and how it changes what they say, know and do, it is also vital to recognise that the program and participants will challenge and shift elements of collective educational practices. The findings in this study show that such shifts could be a difficult experience for participants, their colleagues and their organisations. It could also be a rewarding experience. This suggests that without looking at both individual doings and sayings and collective doings and sayings, it is possible to miss the effect of UTD programs, more generally, on the socially constituted conditions that created the need for the program in the first instance.

Evaluation of UTD programs tends to be undertaken from two broad perspectives: the institutional approach (e.g. Chalmers, 2010) or the pedagogic approach (Gibbs & Coffey, 2004; Knight, 2006). Both approaches suffer from a tendency to foreground studies that adopt a narrow approach to assessing the impact of these programs. They privilege a simplistic chain of cause and effect which focuses on the individual as the unit of study and sees evaluation as a process of monitoring how a participant's attitudes, beliefs and approaches at the beginning of the program have changed by the end of the program (Postareff et al., 2007; Hanbury et al., 2008). When driven by an audience of stakeholders primarily composed of university leaders and external accrediting bodies, some evaluations may also have adopted a limiting and reductionist view of the purpose and impact of these programs in terms of their ability to change, improve or 'correct' the attitudes and behaviours of individual academics. While a focus on aspects of changes occurring within the individual participant may be useful in certain situations it does leave some aspects of the UTD

experience unexplored - particularly the participants' long-term involvement in changing practices within their organisation.

Within the pedagogic approach, some evaluation models have questioned (amongst other things) the range of impacts to be considered, the methods for revealing them and the very definition of a better teacher (Kirkpatrick & Kirkpatrick, 2014; McCormack et al., 2009; Prosser & Trigwell, 2006). Each of these models has emerged from and been embedded in a particular intellectual tradition and has been bound by the precepts and strictures of that tradition. This study has demonstrated that a hermeneutic approach can critically re-interpret those strictures and create a more comprehensive and sophisticated view of a UTD program and its impacts.

Few studies from either the institutional or pedagogic perspectives have taken into account the experiences of working academics following completion of a UTD program. Action to implement new beliefs and approaches is often part of a collective process and, at the very least, attracts public comment, criticism, support or resistance from colleagues. Participants spoke of their experience up to three years after graduating from a UTD program. Their responses lent themselves to hermeneutic analysis, which showed that the impact of UTD programs was not confined to participants' attitudes and beliefs but extended to their subsequent work practices and the practices of those individuals and organisations with whom they worked.

A number of important issues in the evaluation of such programs emerged from the analysis. These are discussed below in relation to the study's research questions.

- What impacts can we identify for the individual who has completed a UTD program in medical education – specifically the University of Sydney Master of Medical Education?
- 2. What impacts can we identify at the departmental, faculty, institutional and professional association levels or contexts two or more years after participants have completed this UTD program in medical education?
- 3. What does this tell us about the evaluation of the impact of UTD programs in general?
- 4. How can a hermeneutic methodology inform future evaluations?

8.1 Impact on the Individual

8.1.1 The program changed participants' understanding of teaching and learning

There was consensus among the participants that the program had reshaped their understanding of education and caused them to rethink their approaches to teaching and learning. When speaking of changes in individual practice, participants chose to describe their experiences during the UTD program and since completing the program in the language of the program itself—that is, the language of the literature of tertiary teaching and learning. In their interviews they created texts, which referenced the intellectual tradition in which the Prosser and Trigwell (2006) model is embedded. They spoke of deep and surface approaches to learning, active learning and student centredness both in terms of how the program had impacted them and how they were now implementing this in their own teaching.

For some, this represented a major rethinking of the way they approached teaching and learning. For others, it gave voice and vocabulary to an unease they had felt about the traditional teaching practices they had been part of and generated an impetus to change them. For many it confirmed they were moving in productive directions with their teaching and gave them tools to move further in those directions. However, for a few, it gave them a lens through which to understand what was happening around them but they remained by and large spectators, lacking either the opportunity or motivation to effect change in their own environment.

This study did not collect survey data using instruments such as the Approaches to Teaching Inventory, as phenomenographic studies in this area have previously done, to measure the extent to which participants were more or less teacher-focused and/or more or less student-focused. Nonetheless, participants consistently talked about their students as active participants in the learning process. Analysis of their texts suggested that student-centredness had become for them a theory in practice and not just an espoused theory. My reading of their texts is that the changes they pursued were aligned with what a UTD program would encourage as good practice and that claims by participants to have become more student-focused were strongly reflected

in the ways they talked about education in terms of what students do more than what they as teachers do. Accordingly, while I cannot 'prove' in some quantifiable way that the participants became student-focused, analysis of their texts did show that most of them, as a result of completing the program, became less focused on transmission-mode teaching and more focused on students as active participants in their learning.

8.1.2 The program changed participants' understanding of teaching and learning and they subsequently changed what they did in their own classrooms

Many participants reported that they had been able to make direct changes to their students' learning environments. A common thread in their experiences of change was their sense of control and authority. Participants felt able to enact changes in spaces where they implicitly or explicitly understood they had control to do so. These spaces tended to be quite localised, such as in the classroom or teaching at the bedside.

Control and authority were also reflected in participants' post-UTD sense of belonging to a profession of educators. When participants felt a part of the profession, often alongside their practices as medical professionals, the distinct beliefs and evidence-based ways of operating as educators carried a certain innate authority. Authority could be manifested when participants enacted or moved into roles involving the coordination of teaching in a clinical rotation or university subject where the role conferred an authority to make changes. Authority could also be assumed internally—the program had instilled a certain degree of authority as participants were now qualified educators and had both the confidence and a certain implied permission from colleagues to act accordingly.

Many authors, and indeed the three main models considered in this thesis, identify changes in classroom practice as an important goal of UTD programs. These changes are variously depicted as changes in participants' underlying perspectives (Prosser & Trigwell, 2006), changes in the nexus between individual beliefs and behaviours (Kirkpatrick & Kirkpatrick, 2014), or indicators of actions between stakeholders (McCormack et al., 2009).

The three depictions of change are relatively silent on the issue of participants' experiences of control and authority to enact such changes, except when they briefly touch on barriers to participants' implementation of ideas from the UTD program. For example, Prosser et al. (2006) noted that it may take time for participants to implement ideas for change, particularly in assessment, while Gibbs and Coffey (2004) remarked that UTD participants could be in departmental environments where having ideas for change was "sometimes frowned upon and taken to imply criticism of more experienced colleagues" (p. 98). Both Prosser et al. (2006) and Gibbs and Coffey (2004), however, deferred any deeper analysis or exploration of these implementation issues. The interviews in this study showed that, when participants' experiences are examined not just at the point of graduation but beyond, the implementation issues are fundamental to their experience of change and sense of control and authority within their organisations. The longer-term examination of post-UTD experiences in this study has introduced the previously under-explored social dimension of impact on practice.

The individual may hold control and authority but, as participants' accounts revealed, control and authority are social phenomena. Control and authority are related to self-efficacy, a concept that has been examined in impact evaluations of UTD programs (Postareff et al., 2007). In such studies, however, self-efficacy is still understood as "an individual teacher's beliefs regarding their ability to perform academic tasks" (Postareff et al., 2008, p. 31). Participants' experiences showed that a sense of self-efficacy can assist them to have an impact on their organisation, but only when their actions have been collectively mediated and interpreted through the practices of that organisation.

Given the turn to practice theory in educational research (Schatzki et al., 2001), it is useful to examine UTD programs through that lens. When participants enacted a shift away from transmission-focused ways of teaching and towards more studentfocused approaches in their classroom, this could be considered as a shift in the practices of direct instruction, implicating both participants and their students. Changes in participants' direct interactions with students at the bedside or in the classroom, for instance, were a negotiation to re-arrange the instructional practices enacted between program participants and their students. This represented a shift in practices in a hitherto unexpected area—participants negotiating new practices with their students. Students are not traditionally associated with the making and unmaking of practices within educational institutions since they are usually regarded as a transient group who move through the organisation and are subject to its practices but are not part of the negotiation around those practices.

Reviewing these interactions surrounding the participants and their activities in their own classrooms addressed the first research question, which is the main focus of most evaluation studies of program impact. These studies tend to conceptualise students as the subject of actions performed by graduates from such programs. It is the latter who are seen as the real locus of change. Furthermore, these studies do not view what happens in the classroom, workgroup or wider organisation as being socially constituted through practices that are negotiated. Although what such studies have to say aligns somewhat with what we find in the classroom, they are all but silent on the impact of UTD programs on the negotiated practices of the workgroup or the organisation. This study, in reviewing the longer-term impact of a UTD, found that there was much to say about these negotiations at the workgroup and organisational level and how they shaped participants' ability to bring about change in the educational practices of which participants were a part and whether it made sense for them to do so.

8.1.3 The program changed participants' understanding of teaching and learning but they felt they could not use their understanding in their work roles

Deciding to curtail one's education responsibilities was an unexpected outcome of the program, but this was the experience of two participants, Paul and Tracy. Both had begun to look critically at their own teaching and had developed ideas for changing their own teaching which, at the time of interview, they had not followed through. The reasons were both individual and contextual and reflected a career path that was leading them increasingly into clinical work and away from teaching. The choice of career path was indicative both of their own preferences and the expectations of their discipline that becoming a clinician was a good career move.

The ways in which Paul and Tracy talked about teaching seemed to indicate that they felt constrained by their environment. Paul spoke of his teaching as 'training' that

followed a set lesson plan. Tracy felt that education and students were no longer a priority for her and that changing practices was someone else's responsibility. They both felt that there were fixed elements in the medical curriculum that determined how students approached their learning and, while they felt that the program had provided them a way of understanding and talking about this, they still felt unable to influence what they saw as entrenched practices. In this sense, Tracy and Paul fitted within the Prosser and Trigwell (2006) model as participants who had not changed their perceptions of their environment. They had developed a more critical sense of their environment but did not feel they had control or authority over many aspects of the environment that impact on student learning. Nor did they feel they had any stake in negotiating or renegotiating the practices that influenced the outcomes of student learning. They had therefore disengaged from education as a field of practice.

As Baden pointed out, the usual career path for clinicians is to do some teaching in the early stages of their medical training, but then to focus on a career in one's chosen medical specialty. Nevertheless, the shifting context in which Baden was navigating allowed him the opportunity to pursue a deeper involvement in education. Paul and Tracy followed the conventional path Baden had described. Paul, reflecting on his departure from the teaching hospital, observed that he was teaching less than he had at the start of the program. He felt that the occasional short courses he led were very structured and offered him very little scope to diverge from what he described as the "set way" of teaching. Paul's perceived lack of departmental flexibility in how he taught aligns with Prosser and Trigwell's (1997) control subscale in the inventory of Perceptions of the Teaching Environment. Tracy described instances of reflecting on and changing how she interacted with students, but she felt that overall much of what she had learnt in the program was now disconnected from her daily work.

This fluidity and mutability of participants' career paths following the completion of the program are a further illustration of the complexity of the experiences of working medical educators which are overlooked in standard models of evaluation. The participants who followed the conventional career path voiced a conception of teaching and learning that seemed to be less evolved from a phenomenological perspective. But this is not the sole determinant of their choices. To a large extent, their career paths were dictated by the social norms and accepted behaviours and practices of the disciplinary group to which they belonged.

8.2 Impacts Beyond the Individual

8.2.1 The program changed participants' understanding of teaching and learning and their actions affected what other people thought and did

A further concern of this study was what impacts could be identified at the departmental, faculty, institutional and professional association levels or contexts two or more years after participants had completed a UTD program in medical education. Participants saw education as a legitimate endeavour, not a sideline. They saw it as a legitimate practice, with its own evidentiary basis, supporting valid principles and practices. Most participants felt that completing the program afforded them some degree of engagement with education as a valid practice and some degree of investment in improving educational practices in their own organisations. They could only pursue this through interactions with colleagues in committees, teaching teams and disciplinary groups or through formal and informal discussions. Some of these interactions helped them to improve or change some practices that hindered them.

The Prosser and Trigwell (2006) model sees these interactions as an extension of the changes to the individual's approaches to teaching as a result of the program. The model is quite specific about the change expected in the individual as a result of the program. The predicted change in participants' conceptions towards a more student-centred focus also anticipates a change in participants' perceptions of their environment, although the exact behaviours that will occur from the program are not prescribed. This strength, however, is also its weakness. The Prosser and Trigwell model does not tell us anything about the actual experiences of trying to change anything in these environments. While the model predicts that participants will change their perceptions of their environment, participants' experiences in this study showed that a change in perceptions is merely a precursor to creating change and a trigger for wanting to pursue change. Other factors are required for participants to effect change in their environment.

The Canberra (McCormack et al., 2009) and Kirkpatrick (Kirkpatrick & Kirkpatrick, 2014) models also identify that participants will interact with and somehow change their organisational environment, without actually specifying how this change occurs. The Canberra model proposes that participants will interact with their environment differently post-program. It predicts that participants will share ideas with colleagues, for example, and will participate in education committees. As the experiences of participants in this study showed, however, participation does not necessarily lead to change. This highlights that the focus of the Canberra and Kirkpatrick models is still on the individual participant as the unit of analysis, even where the success or otherwise of the individual actions of participants is dependent on their interactions with others in their workgroups and organisations.

As the interviews continued to be read and analysed through a number of iterations (hermeneutic process), other themes related to the collective construction of understanding and practices within an organisation emerged. These chimed with Hargreaves' (2011) idea that you can "reconceptualise behaviour change initiatives as attempts to intervene in the organization of social practices" (p. 95) and suggested that a practice theory lens, in which meaning is seen to reside in collective practice rather than in individuals' heads, could be useful to make sense of the participants' experiences.

This analysis of the participants' accounts suggests a move away from a focus on individual conceptions, attitudes, behaviours and choices to a focus on a social view of learning as participation in socially constituted practices. Effecting change required negotiations with colleagues in a variety of situations to reconstitute the shared understanding of how education ought best happen within their workgroups and organisations.

8.2.2 The program changed participants' understanding of teaching and learning and they worked with colleagues to introduce changes to education practices in their organisations

When participants talked about effecting broader change within their organisations or discipline groups, the theme of community frequently emerged. At one level this is unremarkable. Both the Prosser and Trigwell and Canberra evaluation models predict

that the most effective means of producing broad change within an organisation is through collective work involving members of the educational community. What is remarkable is the extent to which the participants felt that they were responsible for initiating the community and that, prior to their completion of the program, no community had existed within their organisations to further understanding of good pedagogy and effective educational practice.

Given this, many felt that their new found status and authority as a credible, qualified, educator enabled them to become the starting point for a community. This happened both formally (for example, through participants being co-opted into roles on education committees or curriculum working groups) or informally by their acting as a model to legitimise and normalise the idea of a practitioner with an education qualification. This latter process proved to be particularly potent, with a number of participants reporting that they were now able to effect cultural change through a network of colleagues who were themselves enrolled in UTD programs. Others were aware that they did not have such a community but the program had helped them to see that such communities did exist externally; for example, they were part of such a community across other institutions or disciplines albeit loosely and distantly.

The fact that the Prosser and Trigwell and Canberra models make assumptions about the pre-existence of such communities can be in part explained because they are primarily concerned with the use of UTDs within universities as organisations that are primarily concerned with teaching and learning. It is reasonable to assume that, within these organisations, there is at least a small subgroup of staff interested in and committed to improving educational practice. Most of the participants in this study worked in medical organisations where the attitude to education was, at best, ambivalent. The accounts of these participants, however, are at odds with what the Prosser and Trigwell and Canberra models expect. It is not just about different workplaces with different cultures and priorities. It is also about the difference between an idealised model of how organisations function and the reality of living within those organisations on a day to day basis.

The growth of social practice theories has given rise to possible lines of analysis of UTD program impact, different from either the Prosser and Trigwell or Canberra models. Such theories have introduced new perspectives by highlighting the fact that

organisations are not only driven by social phenomena but can be conceptualised as social constructions. How learning and teaching is practised within these socially constructed organisations is also a social process that is formed from the arrangement of the various practices involved in working with students and colleagues and understandings of education work constituted in workgroups, departments and the organisation. Looking on organisations and practices from a more social perspective helps to identify and address some of the weaknesses of the implicit conceptions of organisational change in research on UTD programs. In particular, it helps to explain how communities are formed and maintained and how social and political processes cause communities to flourish or falter.

Many participants in this study reported a positive longer-term impact particularly on where, how and with whom they could discuss ideas for improving the education practices of teaching, assessment and curriculum in their work and professional organisations. Generative dialogues can occur in organisations when new ideas, perspectives and practices are imagined, discussed, negotiated and debated through dialogue (Raelin, 2012; Tsoukas, 2009). When participants and their colleagues engaged in post-UTD dialogic reflection, they revealed tacit understandings and collective actions that sustained existing education practices and opened them up for discussion, change and experimentation.

As a result of the program, participants came to question the general and shared understandings of approaches to teaching and learning, both their own approaches and the dominant approaches located in their workgroups and profession. One of the foundational concepts of UTD programs is to expect participants to critically reflect on existing practice in their own teaching (Kandlbinder & Peseta, 2009). In doing so, however, participants disrupted the agreed practices within their workgroups. This challenged the goal-oriented (teleo-affective) ends of these groups, questioning not only what they did but what it made sense for them to do in particular situations.

8.2.3 The program changed participants' understanding of teaching and learning but this understanding was contested by colleagues and their changes to educational practices were resisted in their organisations

The social interactions surrounding organisational change were not always positive. When participants questioned practices, both their own and those in their organisations, this critical reflection was often not perceived as an emancipatory move by colleagues but, rather, as an unwelcome and unnecessary challenge to the existing traditions of the profession. Traditions carry weight and participants' attempts to effect changes in ideas or actions were many times interpreted by participants' organisational colleagues as a criticism of existing practices and established practitioners.

When changes participants wanted to introduce were contested and resisted by colleagues, it is tempting to attribute blame either to an individual or to the nebulous forces of organisational or professional culture. Instead, if the unit of analysis of long-term program impact is the collective education practices sustained and negotiated between people in organisations, this opens up a novel interpretive path for clarifying the meaning of impact. Conceiving of practices as a collection of doings and sayings held together by collective understandings and ends helps us to see that, when ideas are resisted and contested, this may still be a generative and productive albeit difficult process. Group discord around existing practices can often be a precursor to productive activity and not just a barrier to change. This further embodies a shift from individual reflection to collective rearrangement of what it makes sense to do. As Nicolini (2013) points out, "it is through such disputes that practices continually evolve in response to changes in circumstance" (p. 167). This was seen time and again in the reports from participants of occasions when their questions, suggestions or actions exposed and challenged the connections, alliances and conflicts between practices (Warde, 2005).

Participants' departments or workgroups conferred control and authority either formally or informally through routine interactions. Participants' ideas, suggestions and actions at times disrupted those routine interactions. The established way of doing things had an implicit order that was constantly made and unmade through the interactions in the organisation. Looking at longer-term program impact as changes in interactions between stakeholders, as in the Canberra model (McCormack et al., 2009), does provide more detail on participants' actions. When, however, those interactions are analysed as practices rather than actions it becomes possible to build an understanding of why changed actions did or did not change the practices of the organisation.

Implicitly, program impact models such as the Prosser, Kirkpatrick and Canberra models perpetuate what Niewolny and Wilson (2009) have called a container view of context. As such, context as a container for actions becomes an objective category, a stable, inanimate location where changed perceptions, beliefs and behaviours occur. In their interviews, however, the participants spoke of context as something that was continuously negotiated and changing. Such a view of context as a constantly shifting social entity aligns strongly with practice theory's view of context as an "ongoing, immensely complex cultural encounter that constitutes and reconstitutes social products" (Seddon, 1995, p. 400) or, indeed, social phenomena.

8.3 Implications for the Evaluation of the Impact of UTD Programs

This study suggests that developing a complex and nuanced understanding of the impact of UTD programs requires a qualitative investigation based on participants' reflections on their work and the work practices in their organisations over a period of years after completing the program, not just a snapshot of participants' conceptions at the point of graduation. This study used a hermeneutic dialogue of reflection on experiences and texts to elicit a more nuanced understanding of impact. In doing so it highlighted the importance of understanding participants' practices, and their understandings of their practices and the changes they attempted to make to their practices, as social phenomena embedded in workgroups and organisations and subject to constant negotiation and renegotiation with colleagues.

Interviews in this study revealed that a UTD program can and does have a longerterm impact on practice, and that this impact is a negotiated social phenomenon, often sparked by the critical reflection of individual participants on practice, but sustained by open, collective dialogue. As Gibbs and Coffey (2004) report, in UTD programs, participants feel that:

Teaching was valued and the improvement of teaching was encouraged. Innovation and change were supported and openly discussed (p. 98).

Understanding education practice as a social phenomenon highlights the fact that impact occurs beyond the participant and beyond the program, as participants navigate their new conceptions through the cultures of their organisations and negotiate for change around them. Although the findings in this study are drawn from the experiences of participants in one particular program, these findings may be used to illuminate post-program experiences that could have broader application in future evaluation and research of UTD programs generally.

If, as suggested in Chapter 2, 'impact' is defined as a longer-term change in the conditions that caused the need for the program, then a focus on the individual and their actions alone is myopic. The conditions that caused the need for the program are the perpetuation of historically inherited practices in work groups and organisations that need to be opened up for reflection, criticism and change for the purposes of improving educational quality. It therefore seems quite clear that longer-term impact (successful or otherwise) cannot be measured using any of the existing survey instruments. The only way to assess it is long after the event, by talking to people— not only about what they have done but also about their contexts.

Much of what has previously been said about programs and their evaluation has focused on simple, finite, measurable entities to do with changes in individual conceptions or actions or simplistic one-on-one relationships with supervisors or colleagues. While these aspects of UTD programs are important and fundamental to our understanding of them, they do not tell the whole story. In particular they do not speak to the experiences of graduates in their working contexts. This study has only just begun to explore the possibilities of a hitherto unexpected degree of complexity in those experiences of being medical educators. Evaluations of UTD programs need increasingly to acknowledge and incorporate this complexity.

Change in an individual is never a simple thing. Change in an organisation is more complex still. Evaluation of the impact of UTD programs needs to grapple with this

issue of complexity. If the true aim of UTD programs is to effect change in educational practices, it must be through a complex understanding of complex relationships. Longer-term UTD impact, as interpreted in this study, is achieved through subtle and complex negotiation between members of an organisation subject to the equally complex interplay of things such as status, experience and reputation within the organisation. Practice theory provides a way to navigate between seeing the locus of change in the individual and seeing the individual as being shaped and shaping the groups and organisations to which she or he belongs.

Changes in individual participants' conceptions are what are traditionally measured in UTD program impact studies. This study has shown that those changed conceptions influence participants' work and, to varying extents, become shared public property amongst participants' colleagues and workgroups. Participants shared their ideas with colleagues, in their workgroups, in instances of strategic citizenship (such as committees) and instances of scholarship (such as conferences). The ideas shared are often participants' critical reinterpretation of existing teaching, assessment and curriculum practices. Sometimes these ideas are accepted and sometimes they are contested.

Exploring the longer-term impact of the program on the experiences of participants showed that sharing ideas was not always a benign activity. Generative, reflective dialogue, particularly the re-interpretation of the premises of existing practices, can engender a collective sense of valuing teaching and supporting innovation in teaching and learning in organisations. This was often the case when participants were already in workgroups with established idea-sharing practices. In many cases, however, the long-term impact was also manifested in participants' accounts of contesting and resisting existing routines and of having colleagues contest and resist their ideas and actions. This dimension of impact has been under-explored in higher education. To unravel it more thoroughly, we need to go beyond the standard models of impact and look to theoretical constructs which enable us to understand how practice, as a collective entity, bridges individual actions and organisational culture.

This study has shown that a major impact of a UTD program is that it can aid participants' growth as education professionals. Participants come to see medical education as a legitimate, worthwhile profession in which they wished to engage and pursue as a career, rather than as ad hoc acts of teaching. The participants who identified with the profession continued in education and engaged as critics of the existing education practices within their work contexts. They considered it worthwhile to change aspects of their own teaching and aspects of the negotiated assessment methods and curriculum.

Longer-term program impact occurred as participants examined not only their own teaching and education practices, but also participated in the critical examination of education practices as a collective phenomenon. Control of the teaching environment may be measured as an individual perception, but it is actually a socially constructed phenomenon. From the perspective of practice theory, it is important for participants to see themselves as working in a social system where 'how things are done' often reflects socially agreed traditions that can and may need to be challenged and changed. If we expect a UTD program to have a genuine and lasting impact in changing educational practices, then the evaluation of the program needs to look beyond the improvement of individual competence as the sole mission of such programs. The hermeneutic methodology incorporating practice theory in this study is one way to do this.

8.4 How can a Hermeneutic Methodology Inform Future Evaluations?

In interpreting these interviews I have adopted an approach that suggests that the long-term impact of UTD programs can best be understood through a hermeneutic dialogue that treats the interviews in which the participants report on their experiences as texts for analysis. It requires an iterative process of analysis in which the texts produced through interviews are read and re-read to elicit the participants' understandings of their experiences. The participants' horizons of understanding are then compared to the researcher's horizons of understanding derived from the literature and existing studies. Both positions are then re-analysed and reconsidered until they fuse in a new understanding of the participants' experiences, open for reinterpretation by the reader of the study. In this instance, the literature that helped to inform my understandings comprised previous evaluation studies of UTD programs, the literature on program evaluation from both academia and the private

sector, and those theories of social interaction that are loosely affiliated under the heading of practice theory.

Initially, the strength of the hermeneutic approach was in the inductive power it provided. This allowed understanding to be seen as a cyclical process that moves backwards and forwards from specifics to the whole and recognition of the researcher's prior understandings and their role in producing meaning. Interpretation is continually redefined as the researcher engages in dialogue with the text to fuse her own horizon of understanding with those in further texts.

More importantly, the hermeneutic approach gives a better opportunity to understand the participants' own understanding of their journey. It is proposed that this approach involving an iterative reinterpretation of both the participants' texts and the researcher's pre-understandings as a means of reaching a rich and complex understanding of program impact may have relevance for future evaluations of educational development programs.

The historical focus of UTD program impact evaluations on the individual as the unit of analysis has constrained the questions asked of such programs. Perhaps one of the reasons why the individual focus has been so prominent in the literature is because such a focus is readily translated into questionnaire items for surveys of both UTD participants and their students. Such surveys are readily reproducible and survey results over different years or between different institutions are readily comparable. One of the difficulties with studying the longer-term contextual impact of UTD programs is that there have been very few evaluations with either survey or interview questions that have drawn out participants' experiences over the longer-term to illuminate this view of impact.

Practice theory offers a way of making sense of participants' stories in ways that illuminate this longer-term impact on both participants and their organisations. This goes beyond simply quantifying participants' changes in attitudes and classroom practices. The hermeneutic approach led me to practice theory as a way of understanding participants' texts. Hermeneutics has a cyclical aspect that required me to question and rethink my own understandings of UTD programs, their impact and the evaluation of that impact. It became apparent as I moved backwards and forwards through the texts, narrowing and widening my focus, that these texts were often answering questions which were not traditionally asked in UTD program evaluations. I came to understand this through hermeneutics, where the dialogue between interviewee and interviewer and between question and text is always shifting, and through practice theory, which has a unique sense of questions as phenomena created by and embedded in the research process.

Longitudinal in-depth qualitative research often draws on the experiences of a small number of volunteer participants. Stewart (2014) denotes this as an "inevitable limitation" (p. 96) of this type of research and cautions that this may introduce a bias where research participants provide a one-sided and unduly positive representation of UTD programs whilst antagonistic perceptions are missed. A small number of participants (10 or less) is a common and deliberate feature of phenomenological research, and rather than being a limitation, in this study it has enabled a complex and rich reinterpretation of the understanding of UTD program impact. Nonetheless, if the readership of UTD program impact research perceives the outcomes of the research as insubstantial because of the number of participants, rather than worthwhile because of the richer understanding of impact on practice that it offers, this may present a challenge for future studies wanting to draw on the ideas raised in this study.

In hermeneutic inquiry, grasping the questions raised by texts is central to understanding them (Vessey, 2014). As Gadamer (1975/1989) expressed it:

We can understand a text only when we have understood the question to which it is an answer (p. 363)

Evaluating program impact in a compelling manner must therefore focus on asking different kinds of questions of texts—both the texts of participant interviews and the texts of prior research literature, which involves clarifying the horizon of the questions. The approach has highlighted the necessity of a focus on participants' contexts as collective practices in which longer-term changes are located. It has also suggested areas for further exploration in future UTD evaluations that look beyond impact on the individual.

The issues identified in this study through analysis of all the texts from participants and the texts from prior research suggest that future impact evaluations of UTD programs would benefit from addressing several areas. First, an evaluation must be longer-term. Second, it should include information about the social context of the participants in their work after the program. Some elements of this social context which warrant exploration include the following: How much in the field of practice is the participant, that is, to what extent do they see education as a practice and a profession to which they belong? What access do they have to a supportive community—for example, how dense is it, how local is it and how influential is it? How much contention over educational issues have they engaged in (since all change is likely to be contested)? How entrenched and influential is the opposition to change? How have they dealt with this opposition? Have they been successful—completely, partly or not at all? Do they feel empowered and hopeful or disengaged and disillusioned?

8.5 Concluding Remarks

This study has accomplish three things: (1) to develop a methodology to explore the experiences of participants in a UTD program in Medical Education up to three years after completing the program; (2) to use this methodology to generate a complex understanding of the experiences of participants from that UTD program since they graduated; and (3) based on the framework of this initial evaluation, to suggest a possible methodological approach for revealing the long-term impact of UTD programs in general on their graduates' individual work practices in the area of education and for obtaining a deeper understanding of the complex range of impacts across a number of aspects of the graduates' work environment.

From a methodological perspective, this study collected participants' responses through interviews and adopted a hermeneutic approach to distil the essential elements of participants' accounts. This was combined with a practice theory lens to make sense of those elements. The hermeneutic approach acknowledges that the interviews in which the participants report on their experiences operate as texts for analysis and have many levels, including the events described, the meaning participants ascribe to those events and the meaning the interviewer elucidates from the texts. It also acknowledges the preconceptions of both interviewer and interviewee in developing an understanding of the activities described. It relies on an iterative process of analysis in which the focus and themes of the participants are elicited through a cycle of close reading and comparison of the interview texts, reflection and revisiting and re-reading the texts. It acknowledges that both interviewer and interviewee will voice their understandings in terms of existing models. The hermeneutic approach does not bring its own vocabulary but utilises the vocabulary of existing models and structures to describe participants' experiences and the meanings they ascribe to them and the understanding the interviewer derives from them.

The experiences of participants in this study highlighted that contestation, negotiation, conflict, resistance and inertia from colleagues and committees were a routine part of life as an educator. This suggests that within a UTD program there should be some attempt to engage participants with the idea of not just wanting to make changes in curriculum (including assessment) but also how they may need to mobilise support within their organisation for those changes (ie change management). One possible implication of this for UTD program convenors generally may be that one way to heighten the impact of a UTD program would be to encourage participants to examine their contexts, to help them discuss their specific environments and what the existing learning and teaching practices are in those contexts. This could be addressed in individual classes or subjects through learning activities such role plays, verbal presentations, presenting to peer panels, etc. or through other learning strategies authentic to the specific contexts encountered by the participants within their workgroups and organisations.

However this focus on collective practices could also potentially be addressed at a systemic or institutional level through convenors identifying what programs are currently in place at their institution, including leadership and change management programs, and how to partner with these to incorporate them into the UTD curriculum. This may increase the likelihood of UTD programs being seen as part of a suite of support and development opportunities which form part of a student-learning focused culture within the university, its faculties, departments and workgroups (Ramsden, 2006). UTD programs and their participants may have a

greater impact on educational practices over time if these programs become more tightly integrated with other development initiatives such as communities of practice, educational fellowships and leadership development for educators and are recognised as a point of development in the career timelines of university teachers as well as part of their ongoing evolution as student centred reflective practitioners.

Participant interviews and the qualitative analysis thereof is a time consuming endeavour. The hermeneutic phenomenological approach also offers little in the way of quick or precise guidelines for how to interpret participants' experiences. Nonetheless it is important not to dismiss this form of evaluation as unachievable, as it can illuminate new insights regarding the longer-term impact on existing educational practices in organisations and model the kind of critically reflective educational practices many UTD programs aim for their participants to adopt and sustain.

Participants' post-program experiences in this study highlighted that an interpretation of impact relies on a shift towards seeing collective practices as the unit of analysis and away from the view that individual conceptions are held within a container or containers of pre-determined contexts. Future studies could pursue the integration of a hermeneutic approach and practice theory as a tool for broadening understanding of educational practice at course, institution and sector-wide levels. It may prove challenging for UTD program convenors and researchers to justify the time and funds required for this kind of work in future, therefore it may not be feasible or desirable for program convenors to use in-depth interviews and iterative, hermeneutic, interpretation annually in their regular program evaluations. As UTD programs evolve, however, there may be value in undertaking a cycle of more comprehensive longer-term impact evaluation every 3 to 5 years and interviews with participants some time after graduation may provide an illuminating inclusion in such reviews by offering a contextualised perspective on a program's impact on the collective educational practices in which participants are enmeshed.

The practice theory lens acknowledges that participants' work and the environments in which they operate are imbued with collectively agreed ways of understanding how learning and teaching get done. Applying this to UTD programs more broadly, the practice theory lens enables us to understand that participants in such programs are also participants in the education practices of their organisations and professions. They share their colleagues' practical know-how, observe or disregard rules such as explicit directives, admonishments or instructions. Participants in practices share a general understanding of an abstract sense of worth expressed in the activities and embodied in the ends, purposes, beliefs and emotions they espouse and adopt. Changing practices and evaluating those changes should, therefore, no longer be seen as being about barriers or enablers to the transfer of ideas but about shifts and breaks in collectively agreed ends and ways of operating.

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List of Appendices

Appendix A: Information Sheet

- Appendix B: Informed Consent Document
- Appendix C: Participant Demographic Form
- Appendix D: Email to Supervisors

Appendix E: Interview Guide

Appendix F: Ethics Clearance

Appendix G: Training and Career Paths in Medicine

Appendix A

Information Sheet



Faculty of Health Sciences

ABN 15 211 513 464 DR ROBERT HEARD

SENIOR LECTURER

Room G213, C42, University of Sydney NSW 2006 AUSTRALIA Telephone: +61 2 9351 9498 Facsimile: +61 2 9351 9540 Email: r.heard@usyd.edu.au Web: www.usyd.edu.au/

PARTICIPANT INFORMATION STATEMENT

Research Project

Participants' viewpoints of health sciences education/medical education

(1) What is the study about?

This study is exploring health professionals' experiences of working in health sciences education/medical education following their completion of an accredited teacher preparation program, specifically the Master of Medical Education degree at the University of Sydney.

Your observations about your work and your studies will help to shed light on the function of professional development in health and medicine. It is hoped that the results of this study will help to broaden what we know about the needs of health professionals and the possible impact of these programs on individuals and health care organisations.

(2) Who is carrying out the study?

The study is being conducted by Jenny Pizzica to meet the requirements for the degree of Doctor of Philosophy (Health Sciences) at The University of Sydney under the supervision of Dr Heard, Dr Mahony and Dr Thistlethwaite at the Faculties of Health Sciences and Medicine.

(3) What does the study involve?

If you decide to participate, you will be interviewed in private, at a location convenient to you, such as your office at work. The interview will take approximately one hour to complete. You will be asked questions related to your initial motivation for enrolling in the program and your work experiences since graduation. The conversation during the interview will be recording using audio recording equipment and your participation in the interview will remain confidential, known only to the researchers. If you wish, a one-page summary of the interview will be sent to you at a later date. There are no known or anticipated risks to you as a participant in this study.

(4) Will anyone else know the results?

If you would like the interview to occur in your workplace (such as in your office or in a hospital meeting room), clearance will be sought from your workplace supervisor. The relevant supervisor will be someone you can nominate. As a result your supervisor will know the interview is occurring however, the details of your interview will be strictly confidential and only the researchers will have access to information on participants.

At their request, supervisors may be provided with a summary of the preliminary report, however individual participants and their workplaces will not be identified in this report oe in any subsequent reports submitted for publication. The identity of participants and their workplaces will be protected in data collection by a coding system and will not be identified in either analysis or reporting. Data collected during this study will be retained for seven years in a locked office in the researcher's University office.

(5) Can I withdraw from the study?

Being in this study is completely voluntary. You are not under any obligation to consent and if you do consent, you can withdraw at any time without affecting your relationship with the University of Sydney.

You may stop the interview at any time if you do not wish to continue, the audio recording will be erased and the information provided will not be included in the study. To withdraw from the study after the interview, contact Jenny Pizzica, PhD student, on 9514 1662, email jpiz4110@usyd.edu.au or Dr Robert Heard, the chief investigator on 9351 9498, email r.heard@usyd.edu.au.

(6) What if I require further information?

When you have read this information, Jenny Pizzica will discuss it with you further at the time of the interview and answer any questions you may have. If you have any concerns

following the interview, please feel free to contact Jenny Pizzica, PhD student, on 9514 1662, email jpiz4110@usyd.edu.au or Dr Robert Heard, the chief investigator on 9351 9498, email r.heard@usyd.edu.au.

Thank you for considering this invitation.

The research team

Dr Robert Heard, Faculty of Health Sciences, University of Sydney Dr Mary Jane Mahony, Faculty of Health Sciences, University of Sydney Dr Jill Thistlethwaite, Faculty of Medicine, University of Sydney Ms Jenny Pizzica, PhD student, University of Sydney

Any person with concerns or complaints about the conduct of a research study can contact the Manager, Ethics Administration, University of Sydney 02) 8627 8175 (Telephone) and (02) 8627 8180 (Facsimile) gbriody@usyd.edu.au (Email).

This information sheet is for you to keep

Appendix **B**

Informed Consent Document



Faculty of Health Sciences

ABN 15 211 513 464 DR ROBERT HEARD

SENIOR LECTURER

Room G213, C42, University of Sydney NSW 2006 AUSTRALIA Telephone: +61 2 9351 9498 Facsimile: +61 2 9351 9540 Email: r.heard@usyd.edu.au Web: www.usyd.edu.au/

PARTICIPANT CONSENT FORM

TITLE: Participants' viewpoints of health sciences education/medical educationIn giving my consent I acknowledge that:

1. The procedures required for the project and the time involved has been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

3. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s) or the University of Sydney now or in the future.

4. I understand that my involvement is strictly confidential and no information about me will be used in any way that reveals my identity.

5. I understand that being in this study is completely voluntary – I am not under any obligation to consent.

6. I understand that I can stop the interview at any time if I do not wish to continue, the audio recording will be erased and the information provided will not be included in the study.

-- Continued over --

7. I understand that I can withdraw from the study after the interview by contacting Ms Jenny Pizzica, PhD student, on 9514 1662, email jpiz4110@usyd.edu.au or Dr Robert Heard, the chief investigator on 9351 9498, email r.heard@usyd.edu.au.

8. I consent to: –

i)	Audio-taping	YES		NO		
ii)	Receiving Feedback		YES		NO	

If you answered YES to the "Receiving Feedback Question (iii)", please provide your details i.e. mailing address or email address.

Please send feedback to (address or email):

.....

.....

Name (please print.....

Date:

Please return this form to your interviewer at the time of your interview

OR

fax this form back to Ms Jenny Pizzica

Fax: +61 2 9514 1666

Any person with concerns or complaints about the conduct of a research study can contact the Manager, Ethics Administration, University of Sydney 02) 8627 8175 (Telephone) and (02) 8627 8180 (Facsimile) gbriody@usyd.edu.au (Email).

Appendix C

Participant Demographics Form



Faculty of Health Sciences

ABN 15 211 513 464 **DR ROBERT HEARD**

SENIOR LECTURER

Room G213, C42, University of Sydney NSW 2006 AUSTRALIA Telephone: +61 2 9351 9498 Facsimile: +61 2 9351 9540 Email: r.heard@usyd.edu.au Web: www.usyd.edu.au/

TITLE: Participants' viewpoints of health sciences education/medical education

 Graduate Diploma/Graduate Certificate / Master (Medical Education) In which year did you <i>start</i> the degree? In which year did you <i>complete</i> the degree? Did you do it full time or part time? (please circle) Did you go to campus for classes or were you a fully online student? (please circle) Please state your current occupation: 	1.	Which degree did you complete (please circle):
 In which year did you <i>start</i> the degree? In which year did you <i>complet</i>e the degree? In which year did you <i>complet</i>e the degree? Did you do it full time or part time? (please circle) Did you go to campus for classes or were you a fully online student? (please circle) Please state your current occupation: 		
 In which year did you <i>complet</i>e the degree? Did you do it full time or part time? (please circle) Did you go to campus for classes or were you a fully online student? (please circle) Please state your current occupation: 	2.	
 4. Did you do it full time or part time? (please circle) 5. Did you go to campus for classes or were you a fully online student? (please circle) 6. Please state your current occupation: 		
 5. Did you go to campus for classes or were you a fully online student? (please circle) 6. Please state your current occupation: 	3.	In which year did you <i>complet</i> e the degree?
 5. Did you go to campus for classes or were you a fully online student? (please circle) 6. Please state your current occupation: 		
 5. Did you go to campus for classes or were you a fully online student? (please circle) 6. Please state your current occupation: 	4.	Did you do it full time or part time? (please circle)
 6. Please state your current occupation: 		
6. Please state your current occupation:	5.	
·····		circle)
·····		
	6.	Please state your current occupation:
7. Please state your age:		
7. Please state your age:		
	7.	Please state your age:

Appendix D

Email to Supervisors



Faculty of Health Sciences
ABN 15 211 513 464
DR ROBERT HEARD

SENIOR LECTURER

Room G213, C42, University of Sydney NSW 2006 AUSTRALIA Telephone: +61 2 9351 9498 Facsimile: +61 2 9351 9540 Email: r.heard@usyd.edu.au Web: www.usyd.edu.au/

EMAIL TO SUPERVISORS

Email subject line: Permission to interview ... (name of participant)

Email message body:

Dear ...(name of supervisor),

(Name of participant)... has agreed to be interviewed as part of a research study exploring health professionals' experiences of working in medical education/health sciences education.

Your clearance is sought for the interview to occur at (location, name of institution).

The interview participants will be graduates of the Master of Medical Education Program at the University of Sydney and the interview questions will relate to their initial motivation for enrolling in the program and work experiences since graduation.

The study will not seek any personal health information. The intention of the research is to uncover general principles, rather than events specific to any workplace, so the identity of workplaces will be protected in data collection by a coding system and workplaces will not be identified in either analysis or reporting.

If you wish, a summary of the preliminary report can be sent to you for review at a later date and should any comments or concerns be expressed, these will be addressed prior to publication. There are no known or anticipated risks to participants or supervisors in this study.

The University of Sydney Human Research Ethics Committee has approved this research study. An information statement about this study is attached.

To indicate that this interview may proceed at (place, name of institution), please email Ms Jenny Pizzica (jpiz4110@usyd.edu.au). If you have any questions regarding this study, please contact Ms Pizzica via phone +612 9514 1662 or email jpiz4110@usyd.edu.au. or contact Dr Robert Heard +612 9351 9498 or email r.heard@usyd.edu.au

Thank you in advance for your assistance in this project

Yours Sincerely

Jenny Pizzica

PhD Candidate, University of Sydney

on behalf of the research team:

Dr Robert Heard, Faculty of Health Sciences, University of Sydney

Dr Mary Jane Mahony, Faculty of Health Sciences, University of Sydney

Dr Jill Thistlethwaite, Faculty of Medicine, University of Sydney

Ms Jenny Pizzica, PhD student, University of Sydney

Appendix E

Interview Guide

Interview Guide

1. Check – which/when degree completed *Year/full or part time/degree level*

2. Tell me a little about yourself; where you are working now and what your responsibilities are?

Were you in that role when you started the degree? Teaching/educational development work/committee work you are involved with

3. What do you remember about your reasons for wanting to do the course?

4. So it has been (x) years now since you finished, tell me about what you remember from the course that you have made use of? *Which subjects did you do? Electives/independent learning subjects/projects.*

5. To what extent did the course meet your expectations? What were your expectations/reasons for enrolling/where were you working then?

6. What effects do you think the course has had on you?Such as things that you know or do now?Changes in interactions with your colleagues?Changes to aspects of your practices in this organisation?

7. Can you give me an example?

8. You were doing this while you were working in medical education – how were you able or were you able to make changes based on what you learned?

9. How would your students have noticed these changes?

10. How would others have noticed these changes (e.g. supervisors, colleagues, family and friends)?

11. Are there things you are doing differently now and why has that been? *Relative importance of the course*

12. Thinking back about the course again, was there anything unexpected that you feel came out of the course?

Were there things as part of the course that maybe you haven't really been able to make use of, or things that you didn't feel really met your expectations, or weren't as positive?

13. Are there things you wish you could be doing or changing?*Why haven't you been able to make these changes?*

14. Are there ways that you think differently about yourself as a medical educator because of this course?

Detail oriented probes:	Elaboration probes:
When did that happen? Who else was involved? Where were you during that time? What was your involvement in that situation? How did that come about?	Could you say more about that? That's helpful. I'd appreciate it if you could give me more detail Clarification probes: What do you mean by Could you specify how Could you describe more fully
How did that come about?	Could you describe more fully

That's the end of my formal questions

My study is especially focusing on what impact your participation in the course might have had on your workplace/profession and how medical education is done there. Is there anything that I didn't really ask you about or that didn't give you an opportunity to say?

Thank you for your time.

Appendix F

Ethics Clearance



Human Research Ethics Committee

Web: http://www.usyd.edu.au/ethics/human

ABN 15 211 513 464 Gail Briody Manager

Office of Ethics Administration

Marietta Coutinho Deputy Manager Human Research Ethics Administration Telephone: +61 2 8627 8175 Facsimile: +61 2 8627 8180 Email: <u>gbriody@usyd.edu.au</u>

 Telephone:
 +61 2 8627 8176

 Facsimile:
 +61 2 8627 8177

 Email:
 mcoutinho@usyd.edu.au

Mailing Address:

Level 6 Jane Foss Russell Building – G02 The University of Sydney NSW 2006 AUSTRALIA

Ref: PB/PE

20 April 2009

Dr Robert Heard Discipline of Behavioural and Social Sciences Faculty of Health Sciences Cumberland Campus – C42 The University of Sydney Email: r.heard@usyd.edu.au

Dear Dr. Heard

Thank you for your letter dated 5 March 2009 addressing comments made to you by the Human Research Ethics Committee (HREC). After considering the additional information, the Executive Committee at its meeting on **7 April 2009** approved your protocol entitled **"Impact of teacher training programs in health sciences education/medical education - participant viewpoints"**.

Details of the approval are as follows:

Ref No.:	04-2009/11536		
Approval Period:	April 2009 to April 2010		
Authorised Personnel:	Dr Robert Heard		
	Dr Mary Jane Mahony		
	Dr Jill Thislethwaite		
	Ms Jenny Pizzica		

The HREC is a fully constituted Ethics Committee in accordance with the National Statement on Ethical Conduct in Research Involving Humans-March 2007 under Section 5.1.29

The approval of this project is **conditional** upon your continuing compliance with the *National Statement on Ethical Conduct in Research Involving Humans*. We draw to your attention the requirement that a report on this research must be submitted every 12 months from the date of the approval or on completion of the project, whichever occurs first. Failure to submit reports will result in withdrawal of consent for the project to proceed.

Chief Investigator / Supervisor's responsibilities to ensure that:

(1) All serious and unexpected adverse events should be reported to the HREC as soon as possible.

(2) All unforeseen events that might affect continued ethical acceptability of the project should be reported to the HREC as soon as possible.

(3) The HREC must be notified as soon as possible of any changes to the protocol. All changes must be approved by the HREC before continuation of the research project. These include:-

• If any of the investigators change or leave the University.

• Any changes to the Participant Information Statement and/or Consent Form.

•

(4) All research participants are to be provided with a Participant Information Statement and Consent Form, unless otherwise agreed by the Committee. The Participant Information Statement and Consent Form are to be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers, unless otherwise agreed by the Committee and the following statement must appear on the bottom of the Participant Information Statement. *Any person with concerns or complaints about the conduct of a research study can contact the Manager, Ethics Administration, University of Sydney, on (02) 8627 8175 (Telephone); (02) 8627 8180 (Facsimile) or gbriody@usyd.edu.au (Email).*

(5) Copies of all signed Consent Forms must be retained and made available to the HREC on request.

(6) It is your responsibility to provide a copy of this letter to any internal/external granting agencies if requested.

(7) The HREC approval is valid for four (4) years from the Approval Period stated in this letter. Investigators are requested to submit a progress report annually.

(8) A report and a copy of any published material should be provided at the completion of the Project.

Yours sincerely

The Beale

Associate Professor Philip Beale Chairman Human Research Ethics Committee

Copy: Ms. Jenny Pizzica jpiz4110@mail.usyd.edu.au

Encl. Approved Participant Information Statement Approved Participant Consent Form Approved Email Circular Approved Email to Supervisors

Appendix G

Training and Career Paths in Medicine

Training And Career Paths In Medicine

The journey to registration as an Australian doctor has several phases, starting with the undergraduate stage of university and community- and hospital-based education (medical school). The postgraduate phase begins with a hospital-based pre-registration internship (post-graduate year 1), followed by one or more years of pre-vocational residency training in the hospital or in general practice (post-graduate year 2). Finally, vocational (specialist) training as a registrar is undertaken under the supervision of a specialist college (post graduate years 3-8, although the path is slightly different for general practice).

The average time for completion of an undergraduate medical course is 5 years (graduate courses 4 years), pre-vocational training approximately 2 years and vocational training on average 3-8 years.

In the undergraduate phase, students complete a Bachelor of Medicine/Bachelor of Surgery, a 5-6 year degree or a 4-year degree for graduate entry students (i.e. students who already hold a Bachelor degree). From their third year, students undertake clinical rotations involving supervised workplace-based training in hospitals and with general practitioners and community organisations. At the end of the undergraduate phase, graduates receive provisional registration and become junior doctors (also known as doctors-in-training) (Australian Medical Association, 2009).

Graduates must then complete an internship. As interns, junior doctors undergo 48 weeks of supervised clinical training, mostly within public hospitals, although some time can be spent in general practice or community-based settings (Australian Medical Students' Association, 2010). At the end of the internship graduates are granted full medical registration as a resident by the national medical board. They can remain a resident for as many years as they wish. Most junior doctors spend at least another year working in the public hospital as a resident medical officer. This year (or more) of pre-vocational training allows them to gain greater clinical exposure and to help them select and gain entry into their specialty. Residents then move on to specialty vocational training or choose an alternative career path as a

medical academic, medical researcher or administrator (Australian Medical Association, 2009).

Vocational training is the required training for entry into a medical speciality. The specialist training is done by individual specialist professional Colleges, such as the Royal Australian College of Physicians or the Royal Australian College of General Practitioners (RACGP). The duration and requirements of vocational training vary between the specialties. This specialist training can take anywhere from 3 to 6 years or more, depending on the specialty. For example, the training pathway for physicians and paediatricians requires a minimum of 6 years to complete.

With the exception of the general practice specialty, most vocational training is done in public hospitals. General practice training occurs in private practice and community settings. Historically, most of the other specialties conduct training within the public hospital system. Recently, this training has begun to be located in private practices, regional, rural and community health settings (Australian Medical Association, 2009).

Most vocational training programs still require a period of general hospital training (basic training), followed by an examination and a period of advanced training. The training includes posts specific to the specialty in accredited hospitals. In 2010 the Department of Health and Ageing announced expanded access to valid clinical experiences for specialty training. These included private clinics, private hospitals, non-clinical settings, community settings, ambulatory care settings and Aboriginal medical services, thus providing trainees with a wider range of opportunities than what is available in metropolitan tertiary hospitals (Australian Government Department of Health and Ageing, 2010).

At the end, trainees are either automatically admitted as fellows of their college or sit a final exam prior to admission as a fellow (Fox, Hayden & Rao, 2009). Some will continue training in further sub-specialties. Fellows are recognised general practitioners or specialists who are entitled to an unrestricted Medicare provider number, enabling them to practise medicine independently in their chosen field anywhere in Australia. Since 1996, only doctors who have completed their specialist training and have been admitted as a fellow of a recognised medical college can receive an Australian Medicare provider number.

Up to the end of vocational training, doctors will have spent most of their career in the public hospital system, with the exception of general practitioners who will have trained in general practice training settings. After this vocational training, they have a number of practice options, including going into private practice, working as a staff specialist in a hospital or other health facility or splitting their time between private practice and as a visiting medical officer at one or more public hospitals.