

Research Report

Tools for Learning Design Research Project

**Exploring new approaches to
professional learning: Deepening
pedagogical understanding of Singapore
CET trainers through meta-cognition and
practitioner-based research**



June 2012

SUE STACK

Visiting Researcher

HELEN BOUND

Principal Research Fellow

Copyright © 2012 Institute for Adult Learning

Published by the Institute for Adult Learning (IAL), Singapore
Research Division

1 Kay Siang Road, Tower Block Level 6, Singapore 248922 www.ial.edu.sg

This publication remains the copyright of the IAL. Users are free to download this publication for personal reference but any reproduction of content, either wholly or in part, requires the express permission of the Director, Research, IAL.

For queries and clarifications relating to this publication, or for more information on IAL's research, please email research@ial.edu.sg.

Institute for Adult Learning, Singapore

The Institute for Adult Learning (IAL) aims to contribute to the competitiveness of Singapore by developing an effective, innovative and responsive Continuing Education and Training (CET) sector that is able to meet the needs of industries and the workforce. It achieves this by raising capabilities, catalysing innovation, and leading research in workforce learning.

Centre for Research in Learning, IAL

The Centre for Research in Learning (CRIL) undertakes research that seeks to understand and develop the processes and practices of learning, teaching, assessment and curriculum design in the CET sector from multiple perspectives, settings and contexts. We work with those taking part in research projects, engaging practitioners in the research process and thereby developing communities of practitioner researchers.

About the authors:



Dr Sue Stack is an educational consultant, facilitator and researcher. She is a Research Fellow at the University of Tasmania and a visiting researcher at the Institute for Adult Learning in Singapore. She is an experienced facilitator and innovator of practitioner-based action research, bringing years of experience as a teacher and educational leader across different educational sectors. She has worked across a variety of industry sectors as a scientist, engineer, business development analyst, programmer and educational designer. She is interested in holistic and systemic approaches that provide sustainable transformative possibilities.



Dr Helen Bound is a Principal Research Fellow with the Institute for Adult Learning where she heads the Centre for Research in Learning (CRIL). She has a background in vocational training and education, having coordinated the Bachelor of Adult and Vocational Education at the University of Tasmania. Her research work focuses on learning across a wide variety of contexts, including workplace learning, e-learning, professional learning and learning through collaborative activity. She has published on a range of topics including professional development of vocational teachers, workplace learning, online learning and the development of research instruments.

Acknowledgements

Undertaking this research study and the writing of the report was possible because of the work of the following people:

- Kristine Yap, Research Officer, who provided ongoing support and coordination. She offered invaluable critical feedback and made suggestions as we were writing up the report.
- Our IAL colleagues: Koh Tat Suan, Renee Tan, Low Giau Kim, Lee Wee Chee, Michael Choy and Peter Rushbrook who also provided valuable feedback to the findings and implications of the study.
- Renee Tan, for her assistance in running the ecology room workshop and for content used in the Tools for Re-imagining Learning website.
- The team who assisted us with the workshops, publications and the Tools for Re-imagining Learning website: Li Siwei, Hafizah Rahim, Magdalene Lin, Mohammed Ismail, Marianne Daniel and Kelvin Tan.
- Lastly, the participants who contributed their time, commitment and energy, and together created a trusting and caring group.

A website for trainers, curriculum and learning designers, and training leaders, called Tools for Re-imagining Learning, has been created to complement this report. The website features resources for reflecting on teaching practice and undertaking practitioner research as well as “meta” tools designed to be used with learners. Please visit www.ial.edu.sg for more information.

We'd be happy to receive feedback or queries on this report and the Tools for Re-imagining Learning website. Please write to us at: researchpublications@ial.edu.sg. We look forward to hearing from you.

Sue Stack, Visiting Researcher

Helen Bound, Principal Research Fellow

June 2012

Table of Contents

Executive Summary	1
The Tools for Learning Design research project.....	1
Participant research and innovation projects	2
Emergent themes	5
What are the implications of this research for professional learning of trainers?	8
A new model of professional learning	9
Recommendations.....	10
Chapter 1 – Introduction and Background.....	11
Singapore CET training vision	11
The thinking behind the Tools for Learning Design research project.....	13
Context – constraints and issues	14
Models of professional learning	16
What can this project contribute?	17
Chapter 2 – Framing the Project – Key Concepts	18
What are tools for learning?.....	18
Meta-cognition	18
How might we deepen pedagogical understanding?	20
Transformation	23
Ethic of care.....	25
Practitioner Research	26
Dialogical Inquiry	27
Curriculum conceptions	28
Designing the Tools for Learning Design project around the concept of partnership.....	31
An integral perspective of professional learning	33

Chapter 3 – How We Did the Research.....	35
Phases of the research.....	35
Research Methods.....	37
Chapter 4 – Description of the Tools for Learning Design Professional Learning Programme	41
Our processes	41
Programme design	45
First workshop – orientation.....	45
Workshop 2 – building capacity for practitioner research	55
Participant projects	60
Workshop 3 – presenting the projects	64
Chapter 5 – The Stories	69
Summary of participants’ projects.....	69
Five stories of participants’ journeys.....	72
Chapter 6 – Themes	113
Theme 1 – Deepening pedagogical understanding through meta-cognition.....	113
Theme 2 – Being human	126
Theme 3 – The power of context and agency.....	138
Chapter 7 – Implications for Professional Learning.....	143
What tools (e.g. heuristics) and processes are helpful in facilitating meta-thinking about teaching and learning?	143
What have we come to value in terms of participant outcomes?	146
What did participants value about the programme?	147
What are the issues and potential opportunities?	149
New curriculum metaphors for professional learning	154
Chapter 8 – Discussion and Recommendations	157
Context for recommendations.....	157

Recommendations.....	158
Thinking through scenarios.....	158
References.....	159
Appendix – Thinking through scenarios.....	165

List of Tables and Figures

Figure A. Professional Learning Metaphors	10
Figure 1. Project Intention	12
Figure 2. Meta-cognition.....	20
Figure 3. Teacher Knowledges	22
Figure 4. Information to Transformation	23
Figure 5. Partnership Model	31
Figure 6. Integral Theory Four Quadrants.....	33
Figure 7. Four-quadrant Perspectives on Designing Personal Learning	34
Figure 8. Phases of Research Project.....	36
Figure 9. Triple Loop Learning	41
Figure 10. Seven Ways of Inquiry	42
Figure 11. Dialogical Inquiry Model	47
Figure 12. Dialogical Inquiry Model with Meta-cognitive Processes.....	48
Figure 13. Assumptions about Teaching and Learning	48
Figure 14. Participant's Profile Sheet	49
Figure 15. Set-up of the Ecology Room	49
Figure 16. Participants' Collages of what they Valued as a Teacher	51
Figure 17. Thinking Cloud	53
Figure 18. Participant's Project	55
Figure 19. Practitioner Research as a Heroic Journey	56
Figure 20. Integral Theory Four Quadrants.....	57
Figure 21. Integral Theory Four Quadrants – Research Perspectives	58
Figure 22. Participant using the Integral Theory as a Tool.....	60
Figure 23. Integral Theory Four Quadrants – Participant Projects	63
Figure 24. Participants' Perceived Roles.....	65

Figure 25. The Integral Theory Activity.....	66
Figure 26. The Tension and Dilemma Activity.....	66
Figure 27. Participant’s Metaphorical Illustration.....	83
Figure 28. Dialogical Inquiry Model.....	89
Figure 29. Peer Assessment Proforma.....	98
Figure 30. Activity for Tension and Dilemma for Ecology Room Workshop.....	103
Figure 31. Participant’s Assumption(s) of a Teacher’s Role.....	106
Figure 32. Workshop Activity.....	107
Figure 33. Workshop Activity.....	101
Figure 34. Integral Quadrant Theory.....	127
Figure 35. Fetti’s Collage.....	129
Figure 36. Information to Transformation.....	130
Figure 37. Dimensions of Growth in Being and Becoming.....	135
Figure 38. The Ecology Room Workshop.....	144
Figure 39. Professional Learning Metaphors.....	155
Table 1. Criteria on Judging the Quality of Research.....	40
Table 2. Participant Projects.....	61

Executive Summary

The Tools for Learning Design research project

The Tools for Learning Design (TLD) research project aimed to explore how a professional learning model of integrating meta-cognitive

Meta-cognition is “thinking about thinking”

processes with practitioner-based research might deepen the pedagogical understanding of the Continuing Education and Training (CET) training leaders, thus leading to greater innovation within their work contexts.

The design of the professional learning programme aimed to redress a number of concerns or constraints found in the existing system in professional learning delivery, for example:

- Divide between workplace learning and classroom learning, meaning that learning is often not embodied
- Modularisation of professional learning into isolated events, thus limiting the opportunity to deepen pedagogical understandings
- Difficulty of innovating within tight boundaries set by accreditation system

Features of the professional learning programme included:

- An experimental 15-week programme delivered by IAL researchers Dr Sue Stack and Dr Helen Bound
- Nine participants from CET providers, polytechnics and IAL training division
- Emergent design processes – pre-interviewing the participants to understand their needs and their existing understanding in order to design introductory workshops. These workshops helped the participants reflect on current pedagogical knowledges, challenge assumptions, explore other models of teaching and learning and build research skills. Many innovative tools were developed to assist the learning, often as a result of collaborative learning with the participants.
- Twelve weeks of practitioner research projects in the participants’ own workplace contexts. The participants’ research questions were developed

Research Questions

- How can we deepen pedagogical understanding and inquiry of CET training leaders through using meta-cognitive tools?
- What tools are helpful in facilitating meta-thinking about teaching and learning, and how can they be recruited for other professional learning of CET personnel?
- What are the affordances, issues and challenges of creating a professional learning programme like this, and what can be recruited for further professional learning of other CET personnel?

through considering new perspectives in terms of pedagogical knowledges, drawing from core values and bringing in an aspect of meta-cognitive thinking or tools for learning. Support was given by the facilitators during this period.

- Presentations of the participant research projects at a final workshop where each participant contributed an understanding that built a larger picture of the whole training system and its issues and potentials.

The context for the research is described in Chapter 1, the framing concepts in Chapter 2, the research approach in Chapter 3 and a thick description of the processes is given in Chapter 4.

Participant research and innovation projects

The participants were able to research and innovate within their workplaces to various degrees. Five of the projects have been written up as stories in Chapter 5. The following are short descriptions of the participant projects:

Joy of learning

Bill was interested to find out how the joy of learning can enhance learning in his classes. He used Brookfield's critical incident questions (1995) in his classroom to find out how his learners (trainers in other organisations) were experiencing the module and the way it was being taught. He also reflected and journalled about his aims, dilemmas and experiences in his classes, which he shared with his learners. This resulted in increased openness, sharing and participation between members. As he let go of the expectation that he had to be perfect as a teacher and know all the answers, he became increasingly authentic. Bill built strong, meaningful and mindful relationships with his learners who deeply valued his authenticity and the modelling of different approaches to teaching. Through Bill's modelling of the vulnerable reflective practitioner, his learners were also inspired to deeply reflect on who they are as trainers and to involve their own learners in reflective processes.

Improving the quality of feedback for students

Anita began the journey to develop feedback skills of her nursing clinical facilitators by bringing them together. She asked them to reflect and write journals as they worked with students in the field. They used one of the workshop's tools for learning, the dialogical inquiry model, to prompt deeper reflection about the sort of feedback given. It became evident that there was a tendency to scold the students – to see them as having weaknesses to be corrected. By seeing this as just one paradigm of learning (teacher-centred), Anita could then consider other paradigms to provide alternative ways to construct feedback, for example, student-centred (concerned with the development of students and their perspectives) and subject-centred (conversations that enable both the teacher and students to gain new insights) paradigms.

Exploring peer assessment

Philip started with tackling the idea of introducing peer assessment in his programming course in order to give students greater power in the assessment process. Through thinking about the goals he wanted peer assessment to achieve, he developed an understanding that teaching skills in small bits does not develop the vocational identity of being a programmer, but only develops an incomplete set of programming skills. He developed a set of questions to get insight into his students' thinking and experience of the course which helped him better craft his delivery of the course. Through the building in of conversations and reflections about learning strategies and thinking as part of student work, students have gained a greater awareness of the processes they use and are now able to see other points of view.

The being and becoming of a trainer

Michelle was interested in why and how trainers become trainers and stay in the profession, what makes a good trainer and what challenges they face in their careers. She used one of the tools for learning processes, the "ecology room", as a way of eliciting information from a group of trainers through their responses to a range of activities. The emerging rich set of artefacts, values, stories and perspectives surprised Michelle, exposing the human face and the importance of considering the "being and becoming" of the teacher/trainer when devising strategies for the professional development of trainers. This project helped Michelle to weave together her PhD studies with her own work role in the professional growth of trainers. From this, she hopes to tell the stories of the "being and becoming" of trainers to help inform system development.

Better assessment access through technology

John's original intent was to develop assessment tools that integrate learning across and between modules. The implementation of this idea fell through; he reported that it would require time-consuming and difficult negotiations with the Singapore agency for quality assurance. Instead, he introduced Skype as a means to save participants the trip to the provider's premises to undertake the assessment. Even so, for the pilot, participants had to go to the provider's premises because he understood that it would otherwise be a breach of the quality assurance rules that require face-to-face assessment.

Theory/practice divide

Marie initially aimed to get an understanding of her trainers and their students through administering questionnaires which gave frank and illuminating answers. This highlighted some key areas that could be improved. One of these was the divide between the theory and practice of learning from having one day of practical and one day of theory, which was tedious for both students and trainers. A first step was breaking these into half days. A key insight was about her trainers – although elderly,

they still had a desire to learn new things. This, then, opened the way for introducing the use of iPads in the practical classes for reference to theories and bridging some of the theory/practical divide.

Evaluation of DACE

Jimmy took the opportunity to design a multi-probe evaluation of the Diploma in Adult and Continuing Education (DACE) programme which he had been partly responsible for in its delivery, design and management. Using a mixture of questionnaires, investigation of artefacts and focus groups, he collected evidence that suggests that DACE has achieved not only what it originally intended – in developing the professionalism and capacity of trainers beyond the Advanced Certificate in Training and Assessment (ACTA) programme – but has also developed strong and enduring peer relationships and community of practice. These communities are important cohorts that can be targeted for continued professional learning and dialogue. Through the project, Jimmy was able to better articulate his own values and identify the need for the system to grow individuals to grow the system, and to see himself as the human face of the system, providing space for others to grow.

Bringing constructivism and humanism into the design of modules

Fettia originally intended to explore how to bring constructivist and humanist principles into the design of some new modules. Her organisation was in a process of getting a large number of new modules ready for accreditation with the Singapore agency for quality assurance. The limited time frame, the demands of the process, including the amount of documentation required, and her lack of experienced staff meant that she found herself unable to create time and the team to consider the modules from these new perspectives. Further, she herself felt dehumanised by the dynamics of the situation. Her story highlights some of the barriers to change and how, although some ease may be found through one or two strategies (e.g. help by mentoring), it takes a much broader strategic approach to break the cycle of continued practice.

Emergent themes

As part of the research, video footage of the workshops, transcripts, presentations, interviews, artefacts and conversations were analysed for key themes. These themes are more fully explored in Chapter 6.

Theme 1 – Deepening pedagogical understanding through meta-cognition

Our key research question was to investigate how meta-thinking might deepen pedagogical understanding. We found that meta-thinking was intertwined with related processes of inquiry, dialogue and reflection. It was influenced and shaped by and through various tools, personal motivation and opportunities for praxis and feedback within participants' own contexts over time. It was fostered within a learning environment where dialogue was intrinsic to participation, enabling the development of a vulnerable community of care.

This enabled a level of reflection beyond the technical reflection that teachers might normally engage in on a daily basis to improve their teaching. Particular tools were important in mediating this, for example, the “ecology room”, being in multiple roles, modelling of new possibilities, experiencing difference, Dialogical Inquiry Model, Integral Model, and metaphors of teaching and curriculum.

What are the affordances of such a professional learning programme?

- Better articulation of pedagogical beliefs, intents and origins
- More nuanced understanding of system dynamics and cultures
- Change in mindsets, practice
- Being able to adopt and trial in the workplace
- Contribution to professional dialogue, networking
- Developmental growth
- Better alignment of purpose, values, practice
- Creative new products
- Impact on student outcomes or others
- Development of own indicators and goals for own learning
- Self-inquiring practitioner skills
- Learning that becomes embedded in work-practice
- Networking
- Being able to compare own contexts and experiences with others, and to bring their perspectives into reframing one's own issues

Theme 2 – Being human

A key theme that emerged unexpectedly from the project was the need to bring the human being into the picture. This has many dimensions, issues and levels. The following factors give us an idea of this complexity:

- The teacher/trainer being able to express and be acknowledged for her humanness – her heart, values, creativity, authenticity, capacities, journeys, culture, issues and tensions
- The way the teacher/trainer sees her students and relates to them
- The way the teacher/trainer is treated in her workplace and over the course of her career
- The design of the curriculum or learning to give space for both the teacher and students to express, choose their own pathways, expand, grow, flourish and transform
- The type of processes used, the paradigms of learning, assessing and determining the success of programmes.

For a number of participants in the project, a key aspect of *being human* and “*bringing the human being along*” is the opportunity to grow, to “become” – to *expand*. Three key dimensions of growth emerged from participants’ experiences:

- **Presencing** – a greater awareness and connection with self, others and the universe, an opening of heart and soul that enables mindful relationship – an expansion of being
- **Transformation** into new cognitive frames or developmental stages, trying on new roles and identities, adopting new mindsets – an expansion in terms of developmental altitude
- **Flourishing** within existing developmental stages or cognitive frames – creating new experiences, building new understandings and skills, enabling new practice – good learning

It is critical that we understand how the system acts to constrain or enable such growth, and design fluidity and flexibility into systems so that they can grow with humans, and help grow the humans who can then grow them. We need to see growth of the human being as more than *in-form-ing* (with skills, knowledge, and attitudes) within existing frames, which is the predominant metaphor of the competency-based training sector. The human dimension offers new possibility and revitalisation – accessing latent deep needs to contribute and create with care.

Theme 3 – The power of context and agency

A key aspect of the participants' learning was associated with praxis – putting something into practice within their own contexts, thus requiring agency to do so. The level of agency depended on the participants' locus of control (and freedom), their position in their organisations, their understanding of their contexts and their perceptions of barriers (external as well as inner attitudes and habits). The negotiation of agency was, for many, complex and problematic. It was more than creating space for learning; it also became the content of learning.

A historical legacy has been created that works strongly against innovation and creativity. Jimmy's observation that being able to express his values gives him power to grow the system is an astute reminder that we must give room and trust in people's abilities, passion and commitment. When there is greater alignment between our own values and those of the system within which we work, there is greater opportunity for creativity and innovation.

We have conceptualised these constraints not as "outside" the individual, but as system and structure being embodied in individuals and collectives. Structure exists only in and through the activities of human agents (Giddens, 1984). Thus it is possible, therefore, for individuals and collectives to either reproduce those constraints and/or challenge and potentially change them. Jimmy's question, "How can we help to grow the system that can help grow us?" is an important one. The message in this report is that trainers feel a need for greater alignment between themselves, their values, roles and their work.

What are the implications of this research for professional learning of trainers?

See Chapter 7 for a full discussion of the implications of the research. Some of the implications and affordances are listed below.

FINDINGS	IMPLICATIONS
<p>The meta-cognitive tools that were used played important roles in</p> <ul style="list-style-type: none"> • developing and expanding professional pedagogical knowledges • helping to frame research projects, connecting to participants' deep values and concerns, and liberating perspectives from usual construal of problems • acting as tools or probes for participants in their own projects • providing leverage for some individual transformation or growth 	<p>As a product of the research, a website for trainers is being set up with 18 meta-cognitive tools, background concepts and the participants' stories as exemplars. Key tools include the "ecology room" and dialogue.</p>
<p>Practitioner-based research models for professional learning have considerable potential in</p> <ul style="list-style-type: none"> • helping to bridge the divide between classroom learning and learning through the workplace context • illuminating understandings about the system and organisational dynamics • encouraging contribution by learners to their workplace through investigation or innovation <p>However, for effective deployment as a professional learning strategy, there needs to be system and organisational support. (See discussion in Chapter 6</p>	<p>An ongoing culture of practitioner-based research is encouraged through embedding professional learning programmes in IAL. The above website will be used to collect new stories of practitioner-research to encourage sharing of best practices and lessons learnt.</p>

and Chapter 7 for recommendations.)

Emergent design of professional learning programmes alongside research enables the opportunity for innovation and surprise. This is a useful process when wishing to develop out-of-the-box approaches that can illuminate existing mindsets and barriers, and find new perspectives and ways forwards.

We recommend a holistic approach to professional development through rethinking the values of individual stakeholders – and their roles as researchers, trainers, designers, leaders, quality assurers or workplace managers – to consider what values need to be preserved and the necessary support needed to address the cultural, systemic and visionary issues synergistically.

A new model of professional learning

We suggest a holistic approach to professional learning in the CET sector that should consider four key metaphors for professional learning, each dimension contributing to a synergistic whole. These are:

- **Professional learning as delivery** – provision of skill-building or content-based courses (reflects the current system)
- **Professional learning as growth** – the individual is seen as a person, a part of many wholes with a life trajectory of learning and growth.
- **Professional learning as praxis** – professional learning or growth that comes out of investigating and changing one's practice, or changing the contexts surrounding one's practice. This enables participants to actively contribute and build systems while engaged in their own professional growth.
- **Professional learning as dialogical inquiry** – professional learning that is conversational, within a community of inquiry, and which enables dialogue between different perspectives and possibilities. This provides the glue between the other metaphors.

In Figure A, we show how these four metaphors might work together. In the inner darker circle are specific systemic strategies that might support these, and in the outer circle are some of the reasons or values behind these.

Figure A. Professional Learning Metaphors



Recommendations

Recommendations are available separately. For further information please contact Dr Helen Bound helen_bound@ial.edu.sg.

Chapter 1 – Introduction and Background

Singapore CET training vision

This project begins with a belief that a focus on teachers, learning and teaching, rather than training and instruction, better reflects the evolving challenges trainers continuously face as they carry out their work in the evolving Continuing Education and Training (CET) landscape. The vision for deeply committed, innovative educators (as opposed to trainers) was clearly evident in the early roadmaps for Singapore’s adult educators. For example, the October, 2009 Roadmap (IAL, 2009) lists the following core values for adult educators:

- Love for learning
- Respect for uniqueness of every adult learner
- A passion for improving professional practice
- A spirit of inquiry, innovation and improvement
- Passion and commitment to adult education and training to build a skilled and resilient workforce

The principles listed in the same roadmap make reference to educators who are highly reflective, and who continually seek to improve their practice. Earlier Singaporean research provides testimony to the dedication of CET practitioners to their learners, but notes that these same practitioners are frustrated by system requirements that often restrict their efforts to meet their learners’ needs (Bound, 2010). It is also worth noting that a survey from this project with 592 responses from WSQ trainers showed that their most recessive teaching perspective (Pratt, Collins & Selinger, 2001) was developmental (see Tan & Freebody, 2011), that is, most trainers tend not to develop learners’ complex thinking skills. Such findings give us cause to reflect on the match between current and future needs of workers and enterprises and dominant CET practices.

Robertson’s (2008) comments on the Australian Certificate IV in Training and Assessment (TAA) suggest the following as a critically sound evaluation:

The confluence of behavioural learning theory and bureaucratic organisational theory in the early 1990s led to simultaneous efforts to deskill and control teaching by limiting both teachers’ autonomy and their levels of education ... Limited training for teachers was seen as an advantage for the faithful implementation of newly designed “scientific” curricula ... The less educated teachers were, the more they allowed and encouraged greater simplification and routinisation of teaching tasks. (Darling-Hammond, 2006, p.78 in Robertson, 2008, p.19)

Contrary to this mindset, Singapore does not limit training for its CET practitioners, and offers two master’s programmes. However, there is now evidence from earlier research (see Bound, 2010), the Tools for Learning Design research project and the

Diploma of Adult and Continuing Education (DACE) Curriculum Developers project, of bureaucratic controls that limit the realisation of the vision outlined in the 2009 Roadmap for its CET practitioners.

Intent of the project

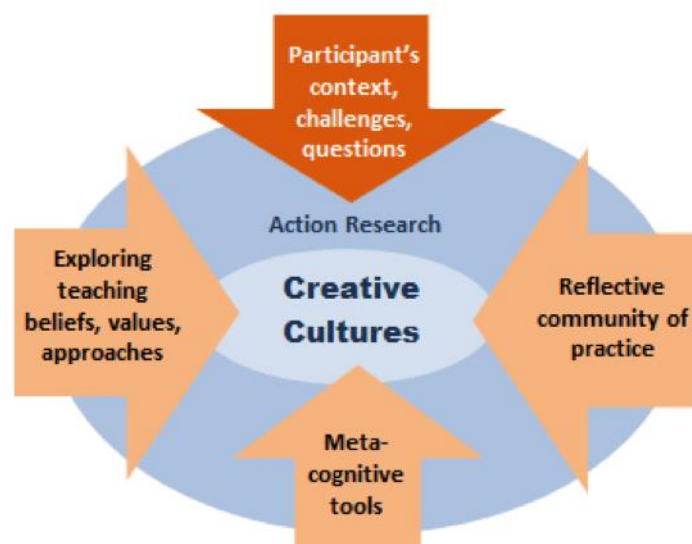
With this context in mind, the authors of this project sought to develop an intervention working with a small number of CET training leaders that would provide space, encourage and support inquiry into practice for the purpose of deepening pedagogical understanding and fostering innovation. The participants would develop a 12-week practitioner research project for their own context based on their own concerns, using meta-cognitive tools. Through planned workshops and ongoing support, we would contribute in the following ways:

Research Question:

How can we deepen pedagogical understanding and inquiry of CET training leaders through using meta-cognitive tools?

- Help participants orient their inquiry in a greater pedagogical context, encouraging them to reflect on beliefs about teaching and learning
- Develop practitioner inquiry skills
- Build capacity in using meta-cognitive tools for their own reflective practice as well as using with their learners
- Foster a reflective and dialogical community of practice
- Build pedagogical and leadership capacities for working with their own trainers
- Help to foster creative cultures

Figure 1. Project Intention



The thinking behind the Tools for Learning Design research project

An earlier project we worked on at the University of Tasmania (UTas) was a starting point for thinking about the Tools for Learning Design research project. The aim of the UTas project was to better understand the nature of the dialogue between online learners in the Bachelor of Adult and Vocational Education (BAVE). From this investigation we developed the “Map of dialogical inquiry” (Bound, 2010) based on Sue’s thesis (Stack, 2007). Helen knew this tool has possibilities in developing dialogue that encourages not only the usual academic requirement for critical thinking, but also encourages and develops the processes of relating to others, reflecting beyond the everyday technical reflection we all engage in, theorising, analysing, imagining possibilities and attending to matters of detail and organisation.

Helen was interested in exploring ways of using tools such as this to contribute to the continuous professional learning of our CET trainers. The ability and skill to employ meta-thinking, or thinking about thinking, is important in positioning practitioners to reflect on their practices beyond the technical level of reflection, and recognise the dynamic relationships between their practices, beliefs and assumptions, their learners, their employers and system requirements. Further, such reflective practices open people up to new ways of seeing and framing problems and issues that enable them to find creative and innovative solutions.

The initial research questions for the project were:

1. What tools (e.g. heuristics) and processes are helpful in facilitating meta-thinking about teaching and learning?
2. Why and in what ways are these tools and processes helpful?
3. How can the tools and processes identified as helpful in this project be used for professional learning for CET personnel?

Our original intention was to gain data from both our own use of meta-cognitive tools with the participants, and to draw from the participants’ own research, where we hoped they would investigate the affordances of meta-cognitive tools with their learners or trainers.

However, as the project progressed, and the participants explored what we meant by “tools”, we recognised the limitations of focusing on tools as end products. Although participants used tools to assist them in their projects, the tools were not the object of study; participants created much larger questions, resulting in a diverse range of practitioner projects. For the participants, the tools were not just the approaches, activities or tools used in the classroom setting but included the whole ethos behind the learning experience, the way the programme was self-reflexive to their needs and what emerged, how it took into account workplace contexts and system constraints, provided supportive dialogue when needed and enabled them to contribute to

something bigger. The paradigm of the model of professional learning was itself a tool for learning.

Context – constraints and issues

Our previous research (Bound, 2010) indicates that most CET/vocational trainers¹ have limited pedagogical knowledge despite years of industry experience. It is thus not surprising many places around the world (e.g. Europe, Australia and Singapore) recognise the need to deepen the pedagogical expertise of trainers working in the sector. Trainers impact on the lives of their students so it only appropriate the sector provides opportunities for pre-service and ongoing professional learning.

In Singapore, ACTA provides an introduction to training. However, its introductory nature to competency-based training, like the Australian Certificate IV TAA, does not provide a deep capacity. The Adult Education Network (AEN) makes an important contribution to the continuing professional learning of trainers in the sector but its seminars and workshops are often single events which do not provide for development over time. There are also deeply embedded system issues that further distance trainers' access to deeper notions of development due to practices such as the following:

- The many providers in the CET

TLD participants cited the following constraints:

- Accreditation requirements – do not allow for innovation, are prescriptive – can we allow assessment in other ways?
- Standards are a historic legacy which don't necessarily reflect what is needed in the workplace now.
- Effectiveness of training should be judged on whether the person takes away something meaningful for the workplace.
- Needing to give every student the SAME experience
- Modularisation does not build developmental capacity – capability needs integration of modules. What is the glue in between?
- The student evaluative feedback of the course or “happy sheets” skew everything – a popularity contest
- It is hard for trainers to bring new ideas to the workplace – they are blocked
- Trainers have little time – on contract basis, adjuncts, employed based on “happy sheets”, not risk-taking.
- Classes – people are tired – lots of content to get through

“We need to think outside the box.”

¹ We have used the term trainers as it seems to be the most commonly used term in Singapore. However, it should be noted that people in the sector variously call themselves and are called trainers, lecturers, instructors, facilitators. IAL uses the term adult educators.

sector are primarily businesses operating for profit; they are not primarily educational institutions with well established quality assurance processes and histories of developing their trainers' pedagogy

- Trainers' access to long term professional programmes based on a deeper notion of development is limited because most trainers are freelancers or adjuncts. Their non-permanent employment status means they have less access to professional learning opportunities, formal and informal, than permanent workers (Burton-Jones, 1999, Owen & Bound, 2001).
- There is a disconnect between courseware development and training – typically, courses are developed by curriculum developers and the courseware handed over to trainers for delivery. There is rarely dialogue between these stakeholders which prevents iterative ongoing development, innovation and improvement.
- Current quality assurance processes require minute attention to detail for course accreditation that leaves little, if any, room for innovative practices.
- Quality assurance and continuous improvement processes use a tick box process that reinforces lesson planning in minute detail that is expected to be followed without deviation. The reality is that the application of this process varies, but the perception within the sector is that there is no room for deviation or change.
- The emphasis on classroom delivery limits programmes incorporating work-based learning. There are several reasons for this. One is the highly privatised nature of the CET sector where many private, for profit, providers prefer classroom delivery as it takes less time and allows for quicker throughput of learners, thus making it easier to receive government funding. Another is that until recently, the funding model of training encouraged classroom learning.

Professional learning does not take place in a vacuum; we are all, trainers included, deeply embedded in our context. We bring understandings, perceptions and thinking in relation to possibilities (such as those outlined above) with us as we engage in professional learning. Therefore, professional learning processes and models must acknowledge and work with the contexts of their participants; these perceptions cannot be left “outside the door”.

Thus a practitioner's context becomes an important part of her ongoing professional learning curriculum. In an earlier study with Singaporean trainers who undertook their own small practitioner research projects, Helen found that trainers actively seek and do attend considerable professional development and learning activities (Bound, 2010). The trainers who took part in the study were particularly interested in learning more about managing pedagogical processes and understanding pedagogical theory as it relates to practice. However, modularisation and short term programmes make this difficult. So it helps to distinguish between different models of professional learning.

Models of professional learning

...the teacher can transform understanding, performance skills or desired attitudes or values into pedagogical representations or actions. ... teaching must be understood to be more than the enhancement of understanding.

(Schulman, 1987, p.7)

There are two key metaphors of professional learning:

- **Professional learning as delivery**

Professional development models are often understood as participation in formal sessions, such as short courses, seminars, workshops and conferences, providing “top-up” of knowledge. Knowledge is seen as a commodity to be transmitted, and is separated from the knower and her contexts (Webster-Wright, 2009).

- **Professional learning as growth**

Professional learning as growth, on the other hand, is seen in terms of the holistic growth of the teacher, including new ways of seeing the world, making changes in practice and having the capacity for self-regulating own journey.

The journey of professional growth [of teachers] into new and better practices [is] often unpredictable; often non-linear; often emotional as well as cerebral. It demands the capacity and strength to ask questions; to analyse and interpret feedback; to discipline the emotions generated by self-study; to change established practices in the light of new understanding; to remain interested and professionally curious (Dadds 2009, p. 3).

Thus the *life-world* or morals, values, emotional learning and experience is as important as *system-world* knowledge – cognition, technical skills and systems (Hargreaves, 2001, Habermas, 1972). Professional learning models that aim to foster growth are more likely to encourage practitioners to systematically examine both life-world and system-world knowledge in dialogue with other professionals as well as stakeholders, and to gain feedback on their practice from multiple perspectives and in multiple ways (Villegas-Reimers, 2003).

“Before starting this project I was juggling two jobs, beginning a PhD, wanting to also pursue a love of literature. I did the project just to keep my hand in with the teaching side, which I also love.

Through the project, and the space I gave myself for reflection and integration, I was able to clarify my values and passions, reframe my work-based questions and create a coherent vision which integrated work, study and personal passions. I now have a five-year plan that enables me to contribute to and develop the training sector while developing myself and doing the things I love. I know it will not be easy.”

TLD participant

What can this project contribute?

1. Develop processes and tools that can be used in other Singaporean training contexts.
2. Contribute to an understanding of how meta-cognitive practices assist in deepening pedagogical understanding.
3. Provide alternative models for professional learning.

In this report, we suggest a need for models of continuous professional learning that

- develop trainers' and curriculum designers' capacities over time
- enable practitioners to develop a deep capacity for teaching and learning, including a greater understanding of pedagogical theory appropriately embodied in their own practice
- provide for ongoing development by developing self-learning capacities, inquiry into one's own practice, networking and dialogical relationships
- enable practitioners to contribute to the evolution of the system within which trainers work, including addressing real issues in their own contexts and contributing to system understandings and solutions.

Developing professional learning for the CET sector requires dialogue and interaction with others which is important if opportunities for deepening professional expertise are to be meaningful and impact on changes in practice. Webster-Wright notes that "it is only through challenging implicit assumptions and questioning taken-for-granted practices that professional learning can lead to changes in practice" (p. 703). This project was based on creating opportunities for dialogue, exploration and investigation on the part of the participants.

Chapter 2 – Framing the Project – Key Concepts

In this section we provide some underpinning concepts that informed the design of the project.

What are tools for learning?

Tools for learning can be considered as specific strategies, heuristics, processes, environments or resources that teachers, students or courseware designers use to enable learning. However, our biggest tool is our own mind and the mindsets we bring which shape how we think about curriculum, teaching and learning, learners and the contexts and purposes for that learning.

Teachers may be able to come up with innovative approaches to their practice within existing frames, perspectives or constraints. However, where the existing constraints, learning cultures or mindsets are such that there is little opportunity for innovation, then reflecting on our mindsets and expanding our view of what is possible can help reframe issues and enable the creation of potential solutions.

What are the affordances of different tools? What helps people to employ tools in their practice? What are the timeliness and usefulness of different tools for different people at different stages of their learning journeys?

Meta-cognition

Critical thinking entails awareness of one's own thinking and reflection on the thinking of self and others as an object of cognition. Meta-cognition, a construct that is assuming an increasingly central place in cognitive development research, is defined in similar terms as awareness and management of one's own thought, or "thinking about thinking" (Kuhn & Dean, 2004, p.270).

Participants in TLD were asked:

What is a tool for learning design?

They responded with: Motivation, guides, procedures, assessment, thinking, effective facilitation, learning activities.

What assumptions are you bringing?

Learning is done to someone, learning must be fun, people naturally want to learn, tools and factors contribute to the learning process and involve human resources, materials.

What else do you see?

Teaching others can be a tool for learning, encourage peer learning, use meta-cognitive tools to make thinking obvious, independent thinking, engaging and stimulating environment, make learning difficult.

Reflection involves thinking and feeling activities “in which individuals engage to explore their experiences in order to lead to new understandings and appreciations”. (Boud, Keogh & Walker, 1985, p.19)

Meta-cognition helps us to reflect on the mindsets that we have. Meta-cognition is generally defined as *thinking about thinking* with two key components— cognitive knowledge and cognitive regulation (Lai, 2011.)

Cognitive knowledge refers to:

- reflecting upon and understanding oneself as a learner, thinker or worker;
- knowledge of how the mind works, ways of knowing or how learning occurs;
- knowledge of and ability to select strategies or tools that can enhance one’s performance.

“Prior to the project I was really unaware of meta-cognition. During the project I started writing reflections about my training sessions. I shared these with my learners and was surprised at the conversations that they evoked. Many started to also reflect meta-cognitively about what was going on, enabling us to have a deeper understanding of the topic, and deeper relationships with each other.”

TLD participant

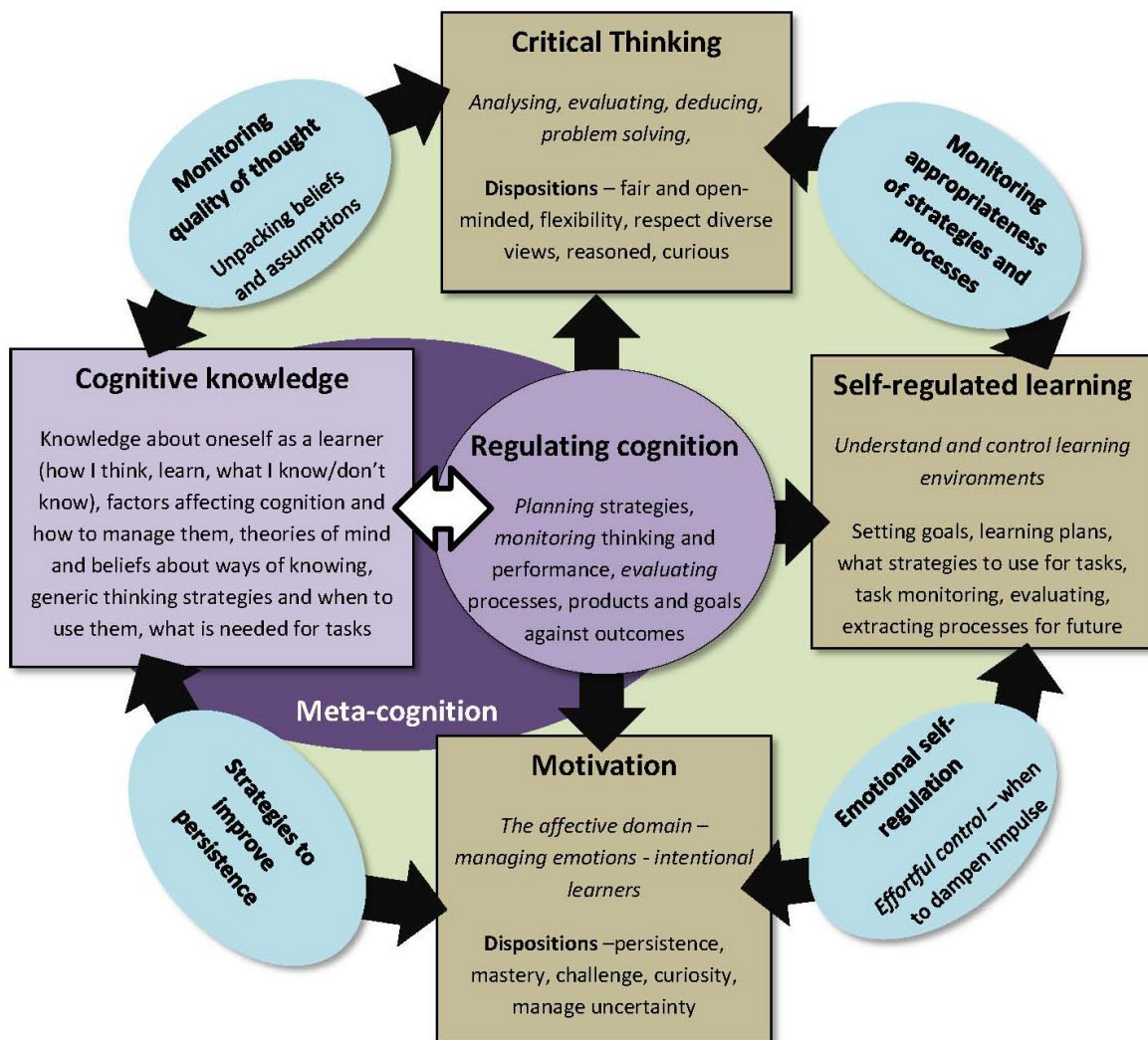
Cognitive regulation enables planning, monitoring and evaluating of one’s thinking and performance.

Meta-cognition enhances motivation, self-regulated learning and critical thinking, and these in turn enhance meta-cognition as shown in Figure 2. Meta-cognition has the capacity to foster **cognitive development**.

Reflective practices for teachers constitute a well-developed field in education, but they often focus on reflective writing or discussion after an event, with questions to help teachers to review their practice. Meta-cognition can be seen as a more encompassing practice that enables teachers to use meta-cognitive tools on themselves when they are teaching and with students to foster continuous self-learning and critical thinking.

How can we cultivate a culture which supports meta-cognition?

Figure 2. Meta-cognition



How might we deepen pedagogical understanding?

Pedagogical understanding is the implicit and explicit knowledge that teachers bring to their own practice. Shulman (1987, p.8) lists key teacher practical knowledges as:

- Content knowledge
- General pedagogical knowledge
- Curriculum knowledge with particular grasp of the materials and programmes that serve as tools of the trade for teachers
- Pedagogical content knowledge, the amalgam of content and pedagogy
- Knowledge of learners and their characteristics
- Knowledge of educational contexts from workings of the groups, classroom, governance of communities and cultures
- Knowledge of educational ends, purposes and values and their philosophical and historical grounds

Deepening pedagogical understanding could focus on building knowledge and understanding in any of those areas. However, it is more common to find professional learning opportunities focussing on development of domain knowledge, specific skills in teaching approaches, or navigating regulatory contexts rather than ones associated with exploring educational paradigms or cultures. Yet for practicing teachers, these different practical knowledges are so entangled with each other that making a significant change to one requires shifts in thinking and behaviour of the other components. Further, this often requires a shift in teaching identity and movement to new paradigms of teaching and learning, requiring changes in organisational cultures.

An example of this is a practitioner research project that Sue co-facilitated for mathematics teachers (Stack, Watson, Hindley, Samson & Devlin, 2010) to develop critical numeracy in their classes – expanding their content knowledge. However, in doing so, the teachers found that they had to move from procedural classrooms of learning the right answer into ones based on discussion and co-construction of knowledge – developing new pedagogical content knowledge and tools. The teachers found they needed to develop their own critical thinking, meta-cognitive skills and become more fluid in their understandings of mathematical knowledge. For some, it required a large shift in teacher identity from expert knower to facilitator. Without the collegial support of the group, together coming up against similar barriers, having a ‘meta’ language to name what was happening and time to put emerging insights into practice, it is unlikely that the new approach to mathematics would have been embodied.

In designing the Tools for Learning Design research project, we wanted to blend practitioner research with a meta-cognitive approach, helping participants to put current pedagogical practice and understanding under a ‘meta’ microscope. This

“I was concerned about improving feedback by clinical practitioners to nursing students during their clinical practice. The common type of feedback was to scold the student for doing something wrong, which becomes emotional for everyone. Exploring different paradigms of teaching has helped me to understand the origins of this and see alternatives.

This view that the student has a weakness that we need to correct comes from a teacher-centred view of directing the student to the right answer. It has been unchallenged. There is no consideration of the perspective of the student, why they might have done that, their level of capability, or their developmental needs (student-centred view).

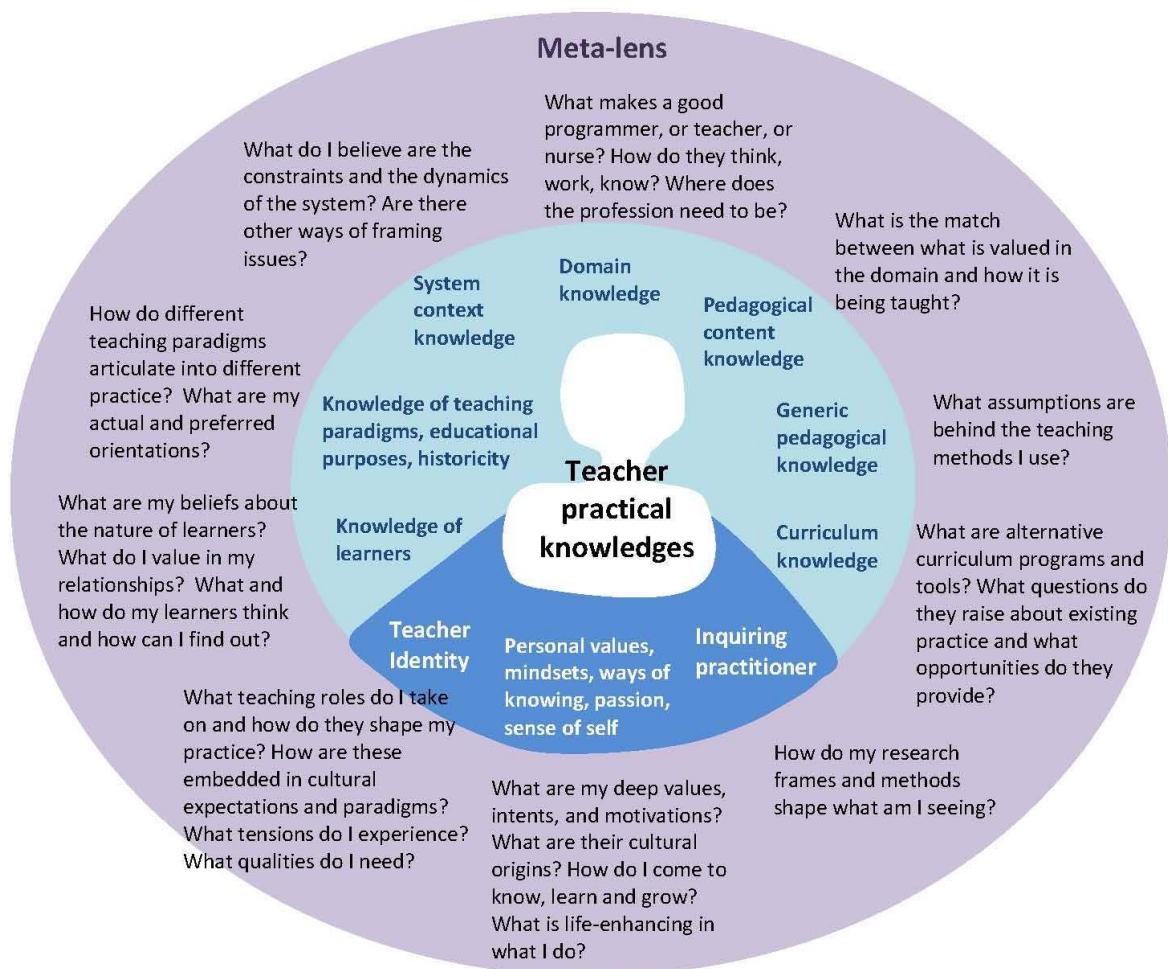
By adopting a subject-centred view of teaching both the student and the teacher together can investigate the issues, and both leave with greater insight. The dialogical inquiry model is a useful tool to help people begin to see ways to inquire together.”

TLD participant

means being able to stand back and reflect on implicit assumptions and practices. A key part of our approach was to provide experiences that might illuminate participants' orientations to teaching and learning, provide language to discuss it, and a culture of going 'meta' as part of our community of practice.

In Figure 3, we aim to illustrate how a meta-lens (outer purple circle) might work with Shulman's practical teacher knowledges (light blue inner circle), to surface unquestioned practice, building meta-cognitive agility along the way. Note that we have added three other aspects – teacher identity, personal values and the inquiring practitioner that we also think are important. The questions in the purple area are some that we deliberately asked our participants as well as ones that emerged from the course of their projects.

Figure 3. Teacher Knowledges



However, a trainer's orientation is not just a matter of personal philosophy. Rather, a trainer's orientation is mediated by the current and historical contexts in which she trains and has worked and studied. For example, in a context where there is a focus on summative assessment rather than a focus on learning, a learner-centred orientation can be difficult. If there are set requirements to pass, trainers or teachers

may perceive there is little or no room for learners to negotiate their own goals and processes for learning, or even to use activities where learners spend most of the time engaged in learning activities as opposed to being passive. So while the above model might help teachers to see more deeply into their practice and contexts, the contexts themselves are still a big player in constraining or shaping what teachers can do. So a change in mindset, teaching identity or pedagogical knowledge might have little traction for actual change in practice where wider learning cultures persist in historic collective mindsets.

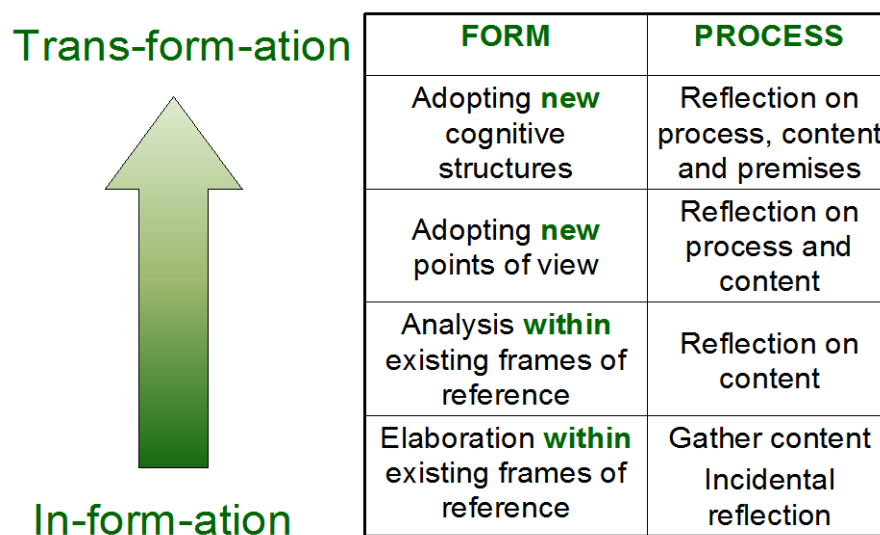
In what ways can people be engaged in a more holistic review of their teaching knowledge? What are the affordances of such an approach?

Transformation

The aim is not to change persons but to provide them with the opportunities to change and develop according to their identity needs. (Bracher 2006, Nissilä 2006, 180-197, Nissilä, 2007, p.1 ISATT)

Transformation is a term often associated with professional learning programmes where a “transformation” in mindsets, understandings, skills or actual practice are cited as key desired outcomes. However, the term is problematic with different meanings and uses that we want to clarify. Newman (1993) suggests that the term “transformation” has been inappropriately used to explain “good learning”.

Figure 4. Information to Transformation
(From Yorks & Marsick, 2000)



Yorks and Marsick (2000) distinguish between learning that is about information within existing cognitive frames and transformative learning in which new cognitive frames are developed. This enables issues and practice to be seen in new ways. Transformation in a psychological sense also refers to movement in developmental

stages (Kegan, 1994; Wilber 2000). For example, a person might move from the *socialised-self*, to the *self-authoring self* and further to the *transforming-self*, with each self possessing different capacities for seeing what it is embedded in. Wilber distinguishes between transformation into new development stages and “flourishing” (in-form-ation) within current stages, seeing flourishing as a critical condition to support continued movement into new developmental stages. Adults undergo transformative development much less frequently than children. The life conditions we are in (Beck & Cowan, 1996) act to contain our development, and when liberated from such constraints, the human being can continue to transform, enabling flourishing to be experienced in new forms.

Mezirow (2000) sees transformative learning as particular approaches to learning, including the ability for self-regulated learning, discernment, meta-cognition, critical reflection and flexibility. Taylor, Marineau & Fiddler (2000) describe developmental intentions of adult educators, which include dialogical approaches to knowledge and self closely related to Mezirow’s characteristics of the transformative learner. Belenky & Stanton (2000) suggest these are characteristics of people who are operating at higher developmental stages, and that it is important to recognise developmentally where people are. For example, for learners who are strongly socialised into being passive receivers of knowledge, it is a big leap to move to such dialogical and transformative learning capacities.

“The project caused me to deeply reflect on who I was as a teacher and a learner. Why did I believe what I did? How do I know what I know? Why am I the teacher that I am? I can’t help but see the world differently now, to question more. I am a different person.”

TLD participant

Mezirow (2000) suggests that transformative learning goes through particular phases: disorienting dilemma, feelings of shame, questioning assumptions, trialing new roles, determining knowledge and skills needed and integration. Teacher identity plays an important role in teachers’ capacity for change, with one’s self-conception of professional identity limiting what is possible. Dilts (1990) and Korthagan (2004) suggest the importance of reflection on the inner self (identities, beliefs and mission) as well as the outer environment behaviour and competencies in order to begin identity development.

A recent interest in how the **teacher’s self** is constructed and reconstructed through social interactions has shown that teacher identity requires the connection of emotion with self-knowledge. (Nias, 1989; Kelchtermans, 1996; Little & Brennan 1996; Zembylas, 2003) The construction of teacher identity is in essence affective and dependent on power and agency. Self-transformation pays attention to both the multiplicities and complexities of teacher identity and the situatedness of emotions. Emotions are indispensable for rationality. Change in perspective happens through a combination of emotion, cognitive

thought and the unconscious and is connected to experiences, their reflection and the system of giving meanings. (Nissilä, 2007, p.12)

Thus it is important to understand the objectives of a learning programme. Is it about transformation to a given endpoint in terms of practice, skills, mindsets; creating opportunities for transformative or dialogical learning; supporting transformation of teachers' professional identity or supporting transformation to new developmental stages should they be occurring? For us, it was providing the processes, time and communities that might support any of these dimensions of transformation, recognising that any change in practice would require multiple changes across different teacher knowledges and be influenced by cultures and systemic practices.

What does it mean to value transformative learning?

Ethic of care

Applying meta-cognitive processes to examining one's practice can destabilise, challenge deeply held beliefs or generate feelings of shame or guilt as much as it may open one up to new possibilities. Further, it can trigger movement to new developmental stages which may be painful, and the results may be a long time in the fermenting. Thus utilising meta-cognitive practices needs to be done within a culture of an ethic of care. This can include:

"I felt initially that I could not speak up about all that was happening to me. I was filled with such shame. However, the opening up that the other participants did, and the way people listened and appreciated each other helped me to find my voice and tell my story."

TLD participant

- Creating vulnerable, yet supportive communities of practice, building relationships between members over time
- Ensuring that critical reflection and deconstructive practices are counter-pointed with life enhancing practices and appreciative inquiry
- Facilitators being mindful of what is happening beyond the classroom
- Teachers and participants being aware of how particular meta-cognitive tools might shape or even distort perspectives rather than provide liberating possibilities
- Encouraging participants to be regulators of their own learning – how much they engage according to their needs

How does our view of learners' natures affect our approach to their ethical care? What are the tensions of being mindful to our learners, yet ensuring they meet learning goals?

Practitioner Research

Practitioner-based research is a well-established approach to building professional practice in the educational field. In addition to building understanding and capacity of the practitioner undertaking the research, it has the capacity to add new knowledge to the field and contribute to solving problems in the workplace or wider system, with impact beyond the original practitioner or group doing the research (Moyles, Adams & Musgrove, 2009; Kemmis, 2009; Cook, 2009). It enables authentic, context-situated learning that bridges the divide between workplace and classroom-based learning, and attempts to address the constraints when learners try to bring their classroom-based experiences into their workplace contexts.

Action research is one genre of practitioner research. Practitioners choose an issue of concern and then create a plan for action, gain feedback, review and continue to adapt in further cycles of investigation over time (Whitehead & McNiff, 2006). Effective action research models encourage double loop learning processes where practitioners reflect on assumptions, values and paradigms, ensuring they are not trapped within existing ways of framing their problem. Personal understanding is developed through a better appreciation of what they value, constructing ‘living educational theories’, paying attention to and managing the contradiction of the self, and embodying new wisdoms into practice. Dialogical communities and critical friends play important roles in exploring and testing ideas and helping practitioner researchers move beyond initial mindsets. Thus meta-cognitive processes, tools and language are critical to the processes of action research. Further, while embodiment of understandings into the workplace context might be the initial goal, action research encourages cycles where the embodied, unquestioned, tacit practices are made visible and open to inquiry. Thus all learning is seen as contingent.

“I have never been involved with a research project like this before. While I value the professional learning that I am getting, I also very much want to feel that I have contributed to something beyond me, that my involvement in this project can help change things for the better.”

TLD participant

Action research can also become a useful probe at context conditions – system regulations, historicity, organisational practices – helping practitioners not just to interrogate their own values, but also have the opportunity for wider conversations with stakeholders about what they collectively value, enabling a refreshing of vision and intent. Action research processes where stakeholders are part of the process of inquiry means that everyone goes on a journey together.

While practitioner research is a popular professional learning model for teachers around the world, it is not much utilised in the Singapore CET sector. Our challenge was to create a programme that will work, despite knowing that the local environment is one with many impediments.

Can this model work in a Singaporean context? What affordances can it give? What are constraints for it working? How can it be part of accredited professional learning and what are the tensions or opportunities that accreditation provides? What will be used to judge the learning that occurs?

Dialogical Inquiry

Through personal conversation, we turn ourselves about and converge or come together... we become transformed as our differing views converge on what is presently beyond us... and the situation changes or becomes transformed as we go through this convergence process. (Doll, 1993)

Dialogical inquiry was a key underpinning process or practice for the TLD project. We considered the notion of dialogical inquiry in several ways:

- **Encouraging a unified relationship between inquiry and dialogue** where inquiry happens in dialogue with self and others (Bound, 2010).
- **Fostering a dialogical community of practice** within the workshops with a particular ethos and supportive culture, enabling vulnerability and disclosure.
- **Encouraging dialogical processes** (explorative, not combative), enabling delving into deeper meanings, exploring alternatives, challenging assumptions and helping one to articulate what is yet to be known. The content and processes of the dialogue become opportunities for people to reflect on their own ways of knowing and seeing. Dialogue becomes “meta”. Specific skills such as critical friend dialogue processes were also used.

Aspects of good dialogue:

- **Ability and commitment to create shared meaning** – construct understandings, shared language, using humour and small talk, creating shared spaces, moving into perspectives of others, engaging in hermeneutic process
- **Rigour in process and thinking** – moving around the map of dialogical inquiry cycle into different voices and modes of inquiry, applying critical thinking, iterativeness
- **Tuning into the different stages of idea development**, using openness to new ideas and criticality appropriately
- **Being inclusive and caring of others** – listening, empathising, giving time, recognising and meeting the different needs of others
- **Being self-reflective of the discourse process** – meta-cognition, recognises the limitations, name and challenge what is happening and move to alternative discourse methods.

Stack (2007)

- **Fostering holistic inquiry** – using all aspects of the self (multiple intelligences, different ways of knowing, learning styles) and providing heuristics and experiences to help this.
- **A dialogical appreciation of complex issues** – the deliberate juxtaposition in workshops of different perspectives or ways of thinking, and putting them in play or conversation with each other. This could be through the creation of diverse artefacts and inviting feedback, with participants taking on deliberate perspectives, or the creation of contrasting learning experiences from different paradigms. Such an approach keeps the tensions and relationships alive, rather than converging to one understanding.
- **As a way of visualising the curriculum** – we implicitly explored the question, what might the metaphor *curriculum as conversation* enable?

Dialogue is a well-established practice within socio-cultural models of learning to foster understanding. It is a key process in action research not just to enable critical thinking of one's research, but also to build shared commitment among stakeholders.

What does it mean to bring dialogical perspectives to designing curriculum?

Curriculum conceptions

There are many ways of considering the nature of curriculum, from how it might be developed, by whom and for what purposes to the underpinning orientations behind it. Schubert (1998) suggests eight curriculum metaphors that educators often use in considering curriculum design.

Curriculum as discrete tasks and concepts	The curriculum is seen as a set of tasks to be mastered and is derived from training programmes in business, industry and the military.
Curriculum as content or subject matter	This metaphor portrays a traditional image of curriculum that stretches back to Pythagoras and Plato. This curriculum is one which receives contents from traditional academic disciplines and transmits them to the learner.
Curriculum as cultural reproduction	The curriculum metaphor is concerned with the notion of transmission of cultural knowledge and values from one generation to another.
Curriculum as a programme of planned activities	Student learning is regarded as a planned programme which is directed and executed by learning organisations. It includes written documents – teacher guides, lesson plans, scope and sequence charts, and curriculum implementation packages.

Curriculum as intended learning outcomes	Curriculum is a process of goal setting and drawing pathways to those goals. The outcomes are expressed in general terms like “ <i>understanding the value of...</i> ” Today, most curriculum frameworks have incorporated this image.
Curriculum as experience	This image of curriculum, following John Dewey, emphasises experience rather than sets of activities. Learners select a learning experience according to its significance in their lives.
Curriculum as agenda for social reconstruction	This view of the curriculum holds that learning institutions should provide an agenda of knowledge and values that guides students to improve society and the cultural institutions, beliefs and activities that support it.
Curriculum as “currere”	The curriculum is the interpretation of learners’ lived experiences – learners come to understand their past, how it drives the present and how it directs the future of their personal and professional lives. Individuals come to a greater understanding of themselves, of others and the world around them.

Professional learning as delivery models in the Singaporean context includes the following orientations to curriculum design:

- *Curriculum as discrete tasks* – Historically there is a breakdown of learning into one standard per module based on atomised competencies removed from the workplace context.
- *Curriculum as learning outcomes* – outcomes designed around industry-based competencies
- *Curriculum as cultural reproduction* – reproducing skills and processes needed for the industry as determined by stakeholder groups and future planning processes
- *Curriculum as programme of planned activities* – detailed learning guides, matrixes and documents that are accredited by the Singapore agency for quality assurance.

In exploring *professional learning as growth* model the TLD project drew from:

- *Curriculum as experience* – providing a focus for a shared experience around a starting intent, and then allowing the participants to choose their own experiences.

- *Curriculum as “Currere”* – orienting the learning around the participant and their journeys, encouraging reflection, enabling them to better understand their past, present and future as professionals.
- *Curriculum as agenda for social reconstruction* – practitioner research aims to solve a workplace issue, thus improving the contexts the participants work in. Applying meta-cognitive lenses causes people to question what they are enculturated in, yielding insights about broader systems and cultures that enable informed action to make more far-reaching system improvements.
- *Curriculum as conversation (Doll, 1993)* – the content or subject is not seen as fixed but open to dialogical exploration, allowing both the teacher and learner to deepen their understanding and appreciation of what is being studied. The curriculum itself can be seen as a conversation between the facilitator and the participants, allowing for emergence as new inquiry questions, shape directions and intents and change the original vision of what is possible.

Although we also planned activities, developed resources and used running sheets, these were not formal documents that had been accredited and which we were obliged to follow. Because this was a research project, we had the luxury of keeping our options open since participants were volunteers and not paying for their learning. We had no specific learning outcomes, standards or competencies for the participants when they started. Rather, we intended the processes to deepen pedagogical understanding and build practitioner inquiry skills and meta-cognitive capacities. How these develop for each person would depend on where they started. We were not aiming for a homogeneous end point as in competency-based assessment.

Thus drawing from these metaphors provides a stark contrast to the existing metaphors of professional learning which, in itself, raised a number of tensions and considerations, illuminating unquestioned practices. Different measures of success and accreditation need to be considered.

How do expectations of curriculum models shape what we believe may be possible? What are ways of legitimising such programmes when they do not necessarily fit within existing models for professional learning?

“I wanted to know what the expectations and goals were of the ‘teacher’ so I knew what I needed to do. I was surprised when Helen and Sue asked me to work out what my own sense of happy achievement might be – to set my own goals and criteria for success. This is very different to normal PL.”

TLD participant

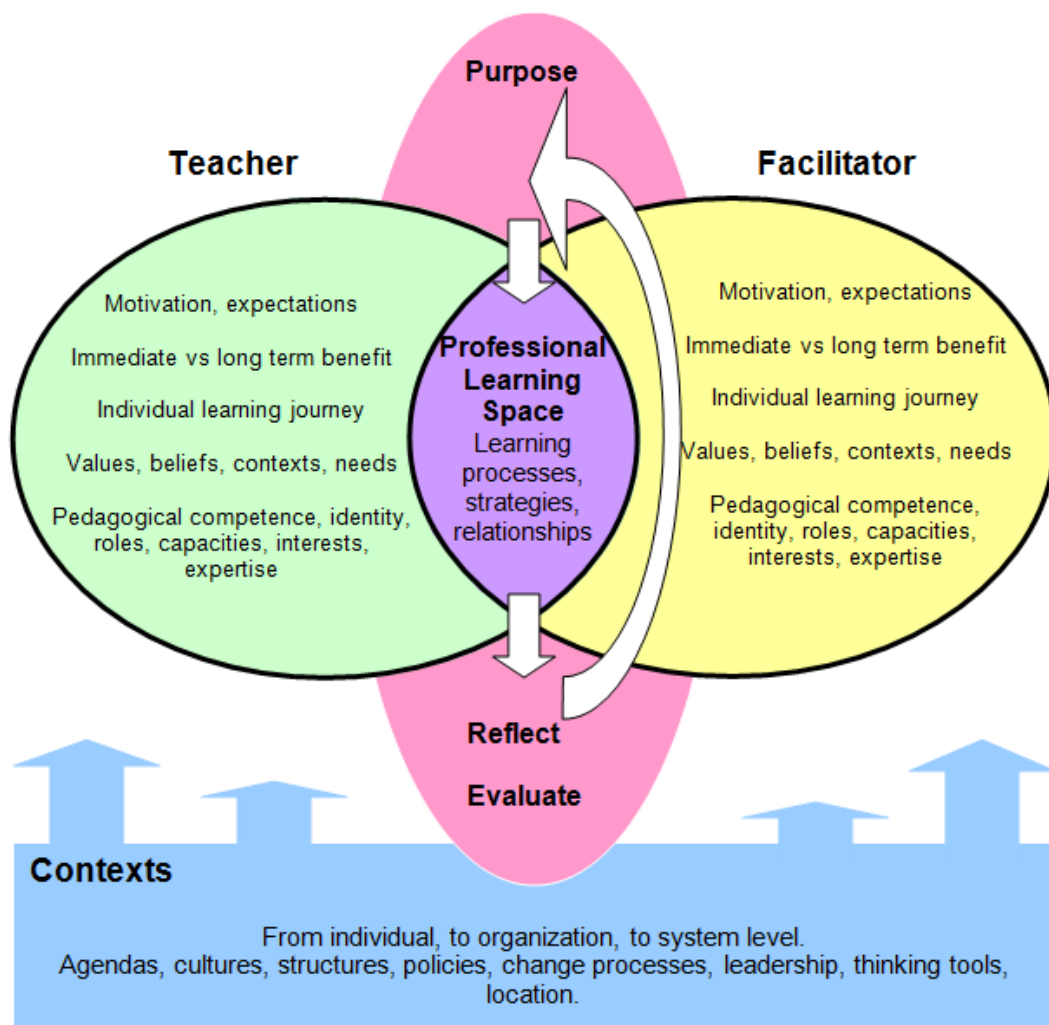
“For me, it wasn’t about completing my project for the final workshop presentations, it was actually seeing an improvement in my student outcomes.”

TLD participant

Designing the Tools for Learning Design project around the concept of partnership

Our orientation to the design of the Tools for Learning Design project both as a research project and a programme of professional learning was partly informed by our earlier research project involving a meta-analysis of the effectiveness and sustainability of some interventionist professional learning programmes in Tasmania (Stack et al, 2011). This study highlights the importance of considering partnership relationships between facilitators/researchers and participants, as shown in Figure 5.

Figure 5. Partnership Model



Source: Stack, Beswick, Kenny, Bound, Brown, Fluck & Abbott-Chapman, 2011, pg 11.

In the initial determination of the purpose, content and processes of professional learning, it is important to make visible the intents, motivations and contexts of all parties so that a shared purpose for professional learning can be co-created. Feedback processes between the facilitator and the participants enable the direction or the content of the learning to be negotiated as the programme progresses. The

facilitator balances an offering of expertise with providing space for the participants to own and create their own learning – making it fit their own contexts and needs, yet open to the developmental possibilities it provides. Further, the facilitator is aware that she, too, is learning, so that together there is a sense of learning *with*, though the object of the learning may be different for each of them.

Thus an important part of our intervention process was to engage in preliminary interviews with participants to determine their needs, orientations, contexts and issues, not just to determine “before” states for the purpose of research, but to inform the project design. These resulted in a modification of our original ideas, and we adopted a process of designing the programme as a loose intention, with details for the design of future sessions emerging from the shared experiences in the previous ones after considerable dialogue and reflection between us (primarily Helen and Sue).

We (Sue, Helen and the participants) were partners in the research with three layers:

- Participants’ own research questions and inquiry and their contributions to resolving real issues in their work contexts (to report to the other project participants)
- Sue and Helen’s inquiry questions about how meta-cognitive tools may be used to deepen pedagogical understanding, drawing from the experiences of the participants in the workshops and from their own projects (to report to a training and policy audience)
- Building collective understandings of the system contexts and constraints, and the inter-connections between projects, enabling the participants to bring that new understanding into their own practice.

An important orientation was seeing the participants as expert knowers of their context which could be recruited to inform the whole. Because this project was an interventionist one where our intent was to deepen pedagogical understanding, we needed to use strategies and come from perspectives that provided opportunities for our participants to make visible their tensions and contradictions, and to enable them to see and to feel the potential for greater alignment between beliefs, intent and actions. In doing this, we were not just concerned about individuals and their individual learning trajectories, but about the contexts in which they work, because institutional requirements at multiple levels (team, organisational, government requirements, industry expectations and standards) often impose practices that may be at odds with practitioner beliefs and intent.

An integral perspective of professional learning

A key heuristic that we used throughout the project to assist our own thinking, and which we used with participants, was the Integral Theory four-quadrant model (Wilber, 2000), as shown in Figure 6. This helps us to consider the different frames that may be brought to considering an issue and the different approaches to researching issues.

Figure 6. Integral Theory Four Quadrants
(Wilber, 2000)

I – Why I do How I experience, feel, think, believe, value, grow.	IT – What I do Behaviours, products, measurables
WE – Why we do Relationships, shared values, cultures, norms	ITS – How we do System dynamics, social systems, policy

Source: Wilber, K. 2000

In Figure 7, we use this schema to categorise some of the key perspectives we use when we think of designing a professional learning programme. In each quadrant we list examples of the questions we considered ourselves when designing the programme.

Figure 7. Four-quadrant Perspectives on Designing Personal Learning

	Interiors	Exterior
Individual	<p><u>I (individual subjective)</u></p> <p>Personal, inner experience How can we better come to know the teacher? (How do they think, value, learn? What are their mindsets, teacher knowledges, teaching identities, contexts, issues, tensions, goals, journeys, past experiences, development stages, wisdom methods?) What experiences are likely to help foster an environment for their transformative learning? How can we recruit all aspects of the holistic self? How can we help people to better articulate their values and teacher knowledges, and to build their capacities? What are participants' experiences during the professional learning and how can we be reflexive to that?</p>	<p><u>IT (individual objective)</u></p> <p>Measures of teaching performance, effectiveness of professional learning How do existing models of professional development and their measures of professional learning shape expectations of what is possible? What are the affordances of alternative models? What might be possible learning outcomes for the programme, and how do we keep this reflexive to participants' own needs and journeys? How will we know if this programme is successful? What are the affordances of the tools, processes, structure and orientations of this type of learning?</p>
Collective	<p><u>WE (inter-subjective)</u></p> <p>Inter-personal, shared cultures How can we help make visible the cultures, policies and histories that shape and socialise teachers' perspectives about teaching/learning, teacher/learner relationships and domain knowledge? What ways of relating will support transformative learning? How can we recruit dialogical inquiry perspectives? What might group processes enable to emerge? What might be new ways of framing system, cultural, organisational contexts?</p>	<p><u>ITS (inter-objective)</u></p> <p>Feedback, system dynamics How might teachers use feedback from their actions in the workplace to support their learning journey? As teachers make changes to their practice, what do the feedback and reactions from stakeholder, regulators and organisations, reveal about the system, cultures and histories? How do existing professional learning, workplace operation and regulatory systems impact on teachers' opportunities to create changes in their professional practice? What is needed to create more space to do so? How might professional learning and its products contribute to the workplace and the system?</p>

Chapter 3 – How We Did the Research

Phases of the research

The Tools for Learning Design research project was conducted from June 2011 to May 2012 with three distinct phases.

1. Reconnaissance, planning

- determining issues within the training sector, referring to past reports of the sector, choosing a focus for a professional learning programme that would address issues, framing research questions, determining likely system constraints and attempting to address these
- framing whole programme, advertising for participants
- interviewing the participants, broadening scope of the project to take into account their issues, seeking out literature including critiques
- planning first workshop and framing the intentions of the following two workshops, drawing on own wisdom, but being required to develop new understandings and processes

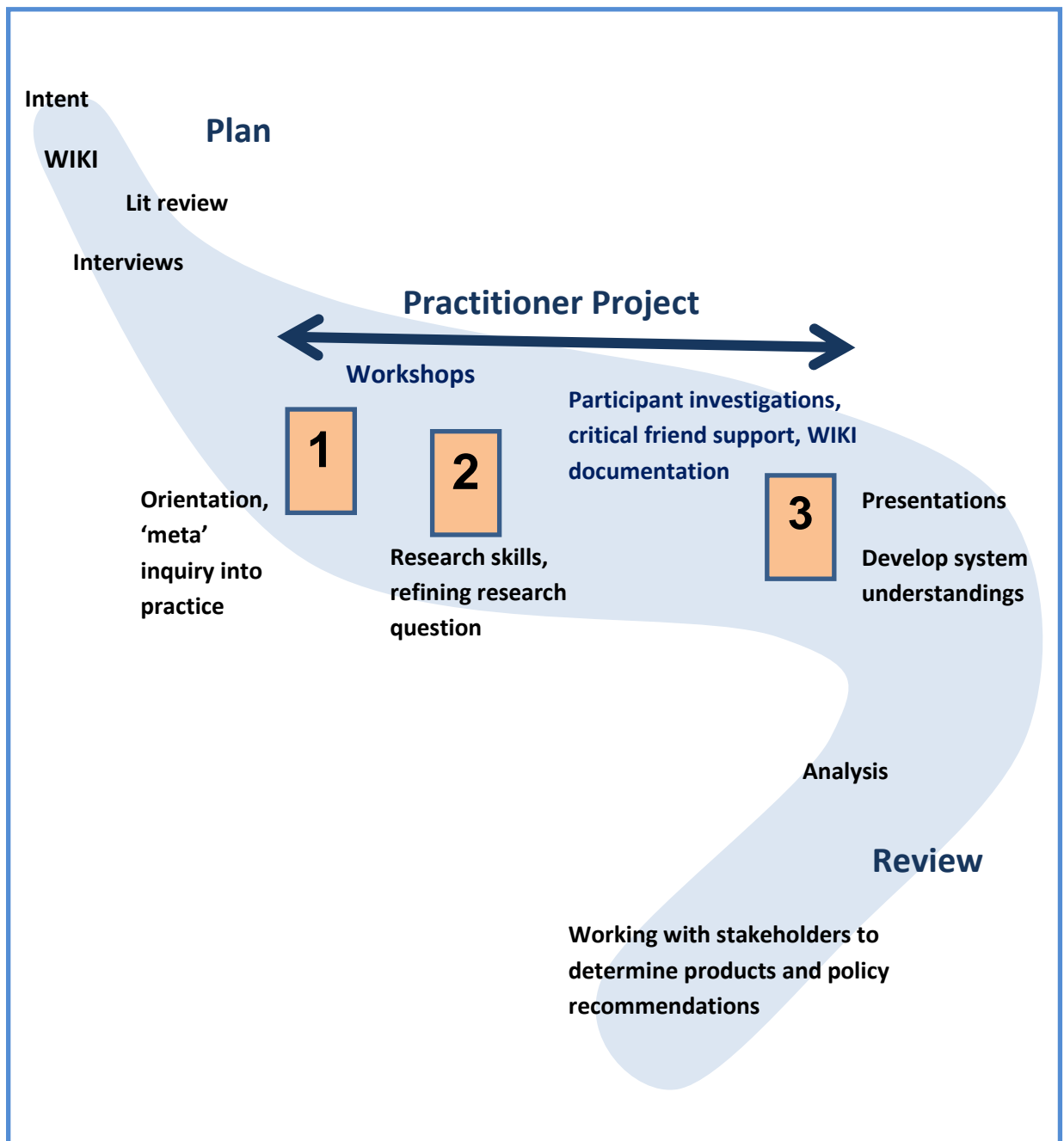
2. Action or intervention (practitioner project)

- providing initial workshops to help orient participants to the project, providing a flexible learning environment for participants to carry out their own projects using practitioner inquiry or action research models
- supporting participants by developing tools, experiences and dialogical opportunities in a timely manner
- providing participants with an opportunity to present and get feedback on their projects in culminating workshop, encouraging visioning of the next steps
- engaging in our own action research and reflective processes in creating a fluid professional learning programme, responding to what is emerging from the participants

3. Review

- analysis and creating products – an iterative process of analysis (thematic, narrative and theory building), debriefing participants, determining from stakeholders what products would be most useful (website, stories of participants), member checking, reviewing new bodies of literature
- running workshops using the stories and tools for new audiences, policy recommendations

Figure 8. Phases of Research Project



Research Methods

During the practitioner phase of the project, we utilised action research methods (Whitehead and McNiff, 2006) to enable fluid responses to the participants' needs and what was emerging, drawing on various tools as described in the next section.

In the review phase, we employed a narrative inquiry approach (Clandinin, 2007) to create stories of selected participants' journeys which would also be used in a website to encourage practitioner inquiry.

From the stories and our original data, we pulled out some key themes using constant comparison techniques (Ragin, 1991) across the stories. One of these major themes, *being human*, emerged unexpectedly from the project, and the participants were keen that this theme was reported. The other themes were more associated with the original research questions which aimed to understand how meta-cognition might deepen pedagogical understanding. The discussions in Chapter 6 aim to provide nuanced explorations of some of the issues as participants strive to bring this to their practice.

Ethics

All participants voluntarily consented to participate, and gave written permission for their participation in the workshops, their artefacts and conversations in-between workshops to be used as data. All IAL projects must receive ethical approval before commencing; this project gained ethical approval on 23 June 2011.

Data Collection

All workshops were video-taped and many group or pair conversations in them were recorded and transcribed. Artefacts created by the participants were collected, partly to be reused for following workshops to help participant reflection, and partly as research data. Mentoring conversations to support participants during their projects were often recorded or summarised, or email records kept. However, many key conversations were ones in the corridors or with the recorders turned off. All participants had a pre-interview. Post-interviews were more informal, with participants volunteering what they valued about the programme and what had changed for them. We interviewed some participants more fully to capture nuances in their stories. All participants had a wiki page where they could collect data for their own project – whether surveys, personal reflections or emails. Further, both Helen and Sue took field notes, wrote critical reflections of their own processes and had dialogues, many of which were recorded.

What stories can we tell from the data?

With a small group like this, such data cannot be used to make broad generalisations. Rather, it provides rich instances which can help us reflect on our

own practice and issues in our own contexts. Each participant's story has a strong centre, the person, and there is a sense of the individual's identity, context, journey, values and tensions that shine through the stories. Stories give a sense of a human being, not just a human *doing*. So these stories are not pragmatic reports, but rather give a sense of the living contradiction that is the teacher.

The construction of these stories uses processes from narrative inquiry research methods. We, the authors, both immersed ourselves in accounts that the participants had of themselves, original interviews, transcripts and summaries of conversations, and the practitioner research data. We discussed the themes or story-lines we felt were important to forefront, while keeping as close as possible to the participants' own final presentations. Sue then wrote the stories, getting feedback from readers about what comes up for them in the stories, and modified them to ensure key messages come across. The participants then checked, modified or gave their responses to the stories. Sue made decisions about how much to put herself in the story, and likewise with regard to the participant, and rewrote when it did not work. She drew from writing action research methods (McNiff & Whitehead, 2009) to help ensure that key facets of the stories include: What is my concern? What do I value? What is my context? What did I do? What do I value now?

Identifying themes and creating models

The process of identifying themes involved moving back and forth between the stories, the original interviews, artefacts, transcripts of workshops, field notes and notes or recordings of discussions with the participants. In the process, we identified repeated themes or data saturation (Corbin & Strauss, 2008). In writing these themes, we moved iteratively between the data and the literature to build on existing knowledge and add to current understandings. A key aspect of our analysis process, as themes emerged, was developing models to express our expanded understandings. These helped us to deepen our own appreciation of the dimensions and enabled further widening into appropriate literature and an iterative interrogation of the data.

Research Questions:

How can we deepen pedagogical understanding and inquiry of CET training leaders through using meta-cognitive tools?

What tools are helpful in facilitating meta-thinking about teaching and learning? Why and in what ways? How can they be used for professional learning of CET personnel?

What does it mean to create a professional learning programme that is self-reflexive around learners' needs, takes into account system agendas, conditions and constraints, and whose products provide an innovative contribution to the sector? What are the affordances, challenges and issues, and how can these be used in considering professional learning in the Singapore CET training contexts?

In addressing the research questions, the stories (Chapter 5), the themes (Chapter 6), the rich description of the professional learning programme (Chapter 5), the framing of key concepts (Chapter 2) and the discussion of the implications for professional learning (Chapter 7) provide implicit and explicit answers for each of the three layers of research questions.

Creating Products

With a project such as this, with so many tools developed and put in action, the research could consider whether the tools worked or not, what affordances they gave and how to improve them. In both the theme and the implications for professional learning sections of this report, we discuss the implications and affordances of some of the tools that we used for deepening pedagogical understanding. For these and many of the other tools, we have improved them based on observations and feedback from the participants, and collected them together as a resource for practitioners, giving examples from the project. We hope as they are used, they will be further value-added.

A key product is the rich account of the actual Tools for Learning Design professional learning programme which we include in Section 6. It aims to give a backroom account to enable readers and practitioners to get an understanding of such an approach to professional learning, warts and all.

Judging the quality of the research

As a qualitative study drawing on a range of approaches, it is appropriate that we use a range of criteria to judge the quality of this research. The criteria set out in Table 1 are typical criteria for qualitative studies in general. Because we use stories of each participant as one form of analysis, we have also included a criterion that is more relevant to the particular approach of narrative inquiry. Table 1 lists how we addressed each criterion.

Table 1. Criteria on Judging the Quality of Research

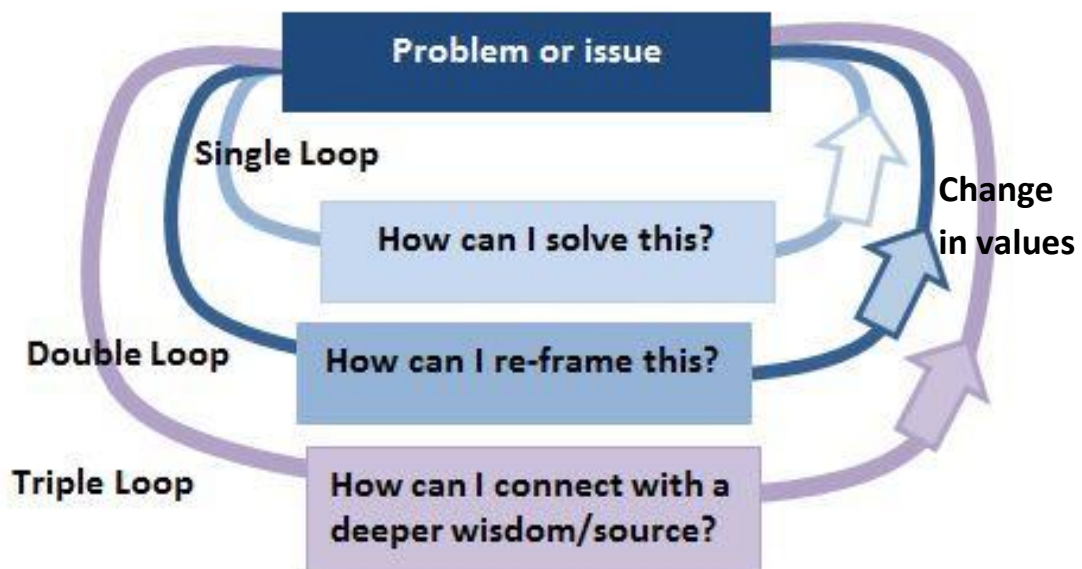
Criteria	How we meet the criteria
The need for verification (Miles & Huberman, 1984) which can range from revisiting field notes, checking thoughts and conclusions among colleagues to uncover different interpretations (Janesick, 2000)	We moved constantly between the range of data (interviews, video, artefacts, field notes, posting of material by participants on our wiki) and writing. We had many conversations, checking with each other as we interpreted, and also sent stories out among colleagues for their interpretations.
Authenticity criteria such as ontological and educative authenticity by increasing awareness among participants of their capacity to engage in critique, particularly moral critique (Lincoln & Guba, 2000)	The aim of this interventionist study was to deepen pedagogical knowledge by encouraging participants to use inquiry and constantly uncover assumptions and supportively critique each other's work. The stories and cross themes are indicative of increased capacity for critique.
Catalytic and tactical authenticity: the ability of the research to prompt positive social change (Lincoln & Guba, 2000)	The requirement for participation was for participants to have responsibility for other CET practitioners, and thus the potential for developing their own team, drawing on the interventions used in this study.
Member checks and audit trails (Janesick, 2000)	Stories were checked by each individual and adjusted according to their feedback.
Thick descriptions (Kincheloe & McLaren, 2000; Janesick, 2000)	We collected a range of data over time, providing material for thick descriptions. Themes were identified through data saturation.
Staying in a setting over time (Janesick, 2000)	Data was collected over three months.
Movement between data and conclusions (Miles and Huberman). Studying parts in relation to the whole and the whole in relation to the parts (Kincheloe & McLaren, 2000)	This process occurred with the participants in the workshops using the Integral Theory map, and on the final day using the holons (see pages 42 and 70). In our analysis of data, we moved iteratively between stories, themes and the working contexts of the participants.
In narrating individual participants' the stories, we need to look for the voice of the participant and of the researcher, to ensure there is a temporal sequence, situate the narration in the setting of the individual and identify themes emerging from the story. (Creswell, 2005)	Stories use a combination of the participant's own words and interpretation by the researchers of each participant's journey (checked by the participants). The working context of each participant is part of the story.

Chapter 4 – Description of the Tools for Learning Design Professional Learning Programme

Our processes

In this project, we were designers and facilitators of learning as well as researchers. This brought in layers of self-reflexivity about what we were organising for our participants. In creating a project for participants to engage in exploring meta-cognitive tools, it was important that we “used” these on ourselves. We drew on tools such as critical reflection (Brookfield, 1995), triple loop inquiry (see Figure 9, Peschl, 2007), presencing (Senge, Scharmer, Jaworski & Flowers, 2004) and *seven ways of inquiry* (see Figure 10, Henderson & Kesson, 2004). This helped to draw out assumptions about teaching and learning that we believed were prevalent in the Singapore training context, as well as our own assumptions, dilemmas and incongruences. It also meant that rather than planning upfront a highly detailed and structured programme, we would be inquiring into and modifying our design as we went along, not only in between workshops, but also during workshops.

Figure 9. Triple Loop Learning
(Peschl, 2007)



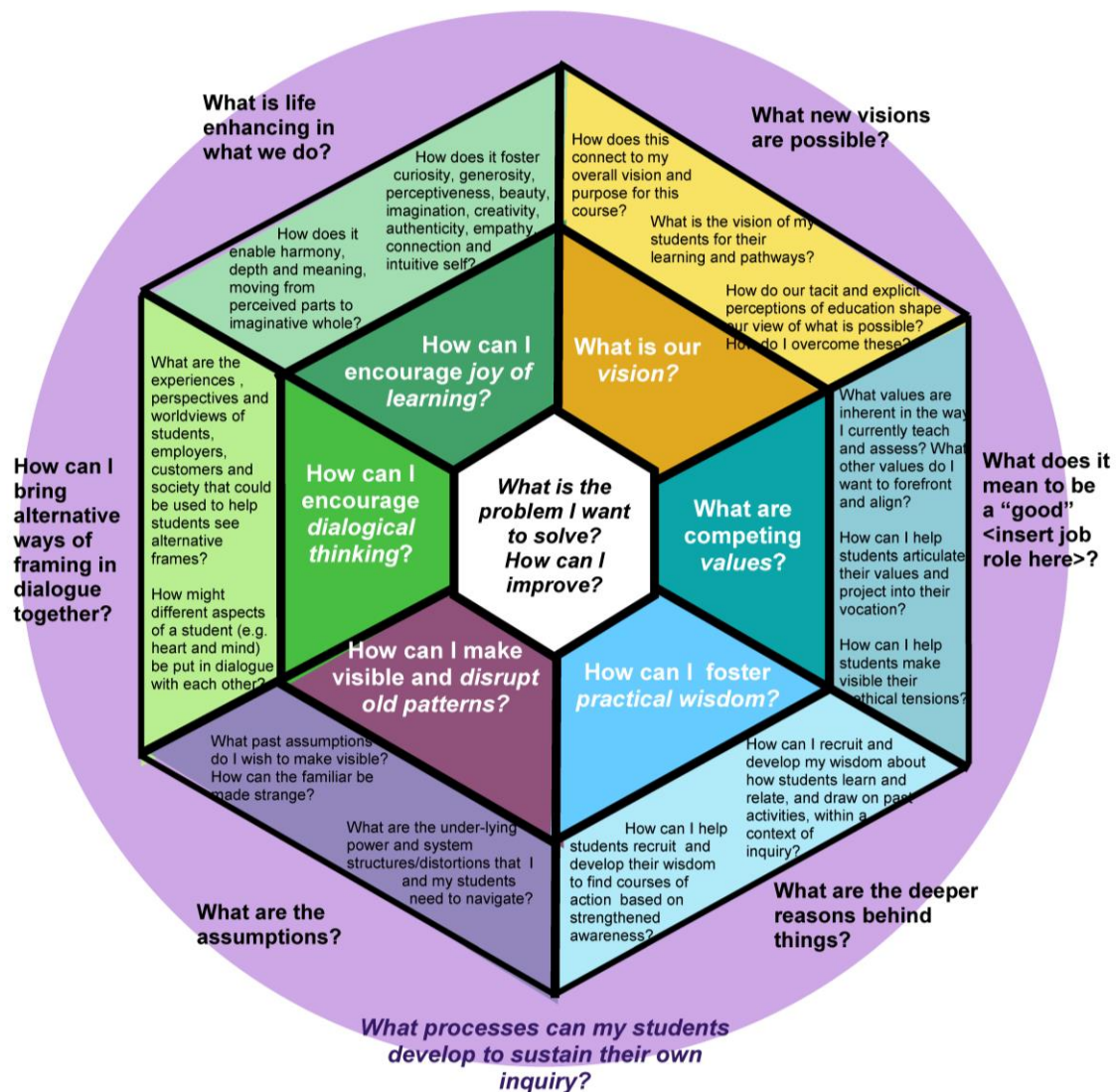
Using such meta-cognitive processes also had the impact of changing our own orientation to thinking about the project. Rather than seeing the project just as a vehicle for participants to deepen their pedagogical understandings and practice, we began to see participants as important “probes” in the greater system, collectively providing nuanced understandings of the dynamics and constraints of the system.

This caused us to bring a new quality of attention to the signals and their meanings and challenged us to rethink what we meant by success; success in terms of individual achievement or in terms of the generated collective understanding?

Figure 10. Seven Ways of Inquiry

(Drawn from Henderson & Kesson, 2004)

Seven ways of inquiry



Pre-interviews

In the planning stage, we interviewed the participants who responded to our invitation flyer. The participants were all volunteers and represented different aspects of the system. Among them were managers, trainers, teachers, adjuncts, CET, WSQ, train-the-trainers, course-ware designers and curriculum designers. The interviews were critical in:

- putting human faces to the participants and building relationships before the programme began
- ascertaining existing pedagogical understanding and practice (of which there was a diverse range),
- discerning some initial orientations and values about teaching and learning
- determining their contextual issues and likely constraints to trialling innovations and engaging in action inquiry
- determining their areas of interest for exploration in their own projects

The limitations of doing research in a classroom context meant we had to be flexible about what the projects could be. Although some of the interests were beyond our original intentions, we felt it was important to accommodate these. Participants were interested in our modelling of novel tools for learning and exploring student-centred practices. They were also interested in being involved in both their own research and the overall research project. We had expected a certain level of pedagogical understanding and orientation to teaching and learning, as evidenced in the research reports about the sector, but we had to rethink these assumptions with a couple of participants who were engaged in post-graduate research degrees.

The interviews caused us to widen our scope for the project, and to think about a design which reflected the participants' needs, interests and understandings while incorporating our own intent. It also caused us to look more deeply into literature, expanding and critiquing notions of practitioner and action inquiry research, reflection, dialogue, meta-cognition, transformation and adult learning theory. In addition we looked carefully at some of the DACE modules in order to understand the cultural framing of teaching and learning. We were mindful of opening up

Interview question themes

These enabled structured conversations to help better understand the participant:

1. What are the participants' context, issues and constraints?
2. What are their views of teaching and learning – what might they consider their favourite teaching experience and why – what informs their practice?
3. What is their understanding of meta-cognition and reflective practice?
4. What are they interested in exploring – background experiences in innovation – and what is likely to prevent this?
5. Facility with using on-line learning techniques

dialogue around individual and cultural orientations to teaching and learning without imposing our own cultural values, judgments or solutions.

Sue's reflections of the planning stages:

I had a strong feeling of disconnection working from Hobart, Tasmania, geographically and culturally isolated from Singapore. More than anything I wanted to get inside the cultures there – walk into classroom and workplaces, to get a feel for how things were done, talk to learners, teachers and courseware designers and ask them what they were thinking, feeling, valuing and learning. I had a deep concern about parachuting in and providing an intervention with only reports and interviews as my guide.

Our intentional field:

- Provide a focal experience that will help individuals deepen their pedagogical understanding through bringing meta-cognitive tools or processes to their practice, better articulating their living theories and their own thinking processes.
- Model and give opportunities for people to experience and explore alternative learning approaches as investigators or critics, rather than absorbers and replicators.
- Help expose assumptions and orientations about teaching and learning in a manner that would open up possibilities rather than making people feel diminished.
- Support participants to find their own projects that would weave in their own issues and interests
- Build participant capacity for research, understanding the stance of their research approaches, and enabling them to inquire in rigorous ways into their own practice, developing self-directed, life-long learners
- Recruiting the participants as co-researchers, each revealing something about the system as they “probe” it with their research and add to our whole understanding
- Bringing self-reflexivity to the process – observing ourselves and others, getting feedback, sensing, checking our own assumptions and stances, deepening our own understanding, asking what are more imaginative wholes, what gives greater life, what helps to better articulate our values, allowing for emergence and modification

Programme design

We designed the programme to have three workshops. The first two (within three weeks) would help participants set up their own practitioner research projects, and the third (12 weeks later) to come together to report back and consider implications of the individual research projects from a more systemic view. The first workshop aimed to orient participants to teaching and learning paradigms and to help them articulate their values, enabling research questions to move beyond existing frames of reference and bringing in triple loop learning processes. The second workshop helped to focus the research question, build up understanding of different research paradigms and introduce some research skills. During the intervening 12 weeks, we supported the participants by acting as critical friends or mentors, and they could also recruit other critical friends while using a wiki to capture learning journeys and enable cross-communication.

First workshop – orientation

The first workshop was designed to orient the participants to the project, framing it as a multi-layered research project with all of us having different research questions, yet contributing to a better understanding of the whole. The system constraints were discussed up front – making visible those blockers to trialling innovation practices within the workplace. The director of the Singapore agency for quality assurance was invited to listen to participant concerns and provide clarification. She provided assurance to participants that the agency is outcome-based and there are many ways to achieve the outcomes.

We then provided layered learning experiences to help the participants surface their assumptions and orientations to teaching and learning. We introduced the notions of paradigms of teaching and learning not just through giving theory, but also through creating experiences of what these different paradigms might look like. Each activity had multiple purposes, generated content that was a useful part of the project, provided opportunity for meta-cognition, and helped us to orient ourselves within broader paradigms. We used three frameworks to underpin this: theories of learning (e.g. behaviourism, cognitivism, constructivism, humanism, etc), curriculum metaphors (Schubert, 1998) and teaching metaphors and their philosophic origins (Davis, Sumara & Luce-Kapler, 2008)

Teaching metaphors

- **Teaching as drawing out:** *mystical traditions* – awakening, actualising
- **Teaching as drawing in:** *religious traditions* – indoctrinating, disciplining
- **Teaching as instructing :** *rationalist approach* (cognitivism) – informing, edifying
- **Teaching as training :** *empirical approach* (behaviourism) – grading, conditioning
- **Teaching as facilitating:** *structuralism/constructivism* – mentoring, modelling
- **Teaching as empowering:** *critical theory/post-structuralism* – liberating, subverting
- **Teaching as occasioning:** *complexity science* – improvising, structuring complexity
- **Teaching as conversing:** *ecology* – mindful participation, pedagogical thoughtfulness

Source: Davis, Sumara, & Luce-Kapler (2008). *Inventions of Teaching: a genealogy*. New Jersey: Lawrence Erlbaum

The dialogical inquiry model

We introduced the dialogical inquiry model (Stack 2007; Bound, 2010) through a game that shows people's learning styles with Sue playing a role as an "instructional teacher'. The learning style profile was interesting for the participants as they had not done anything like it before, though the teaching/game approach with Sue giving lock-step instructions was one that they were very familiar with. The participants were able to compare learning profiles and discuss how these might shape their preferences for certain ways of teaching and learning, and to consider which dimensions their own organisational training might be focused on. Were there any mismatches between intention and delivery?

Figure 11. Dialogical Inquiry Model
(Stack, 2007; Bound, 2010)



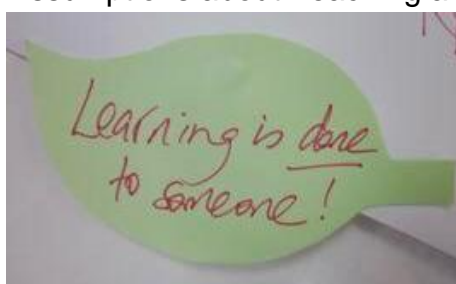
The next layer used meta-cognitive practices to reflect on the veracity and value of the model in this context and what else it might be used for (we reprised its use throughout the workshops in different forms such as thinking about the dimensions of feedback that we give to others). It was interesting that until we offered this opportunity for critique of the process and the model, no one offered any critique (though some had been thinking about it) because of the culture of politeness – “We do not wish to be critical of the teacher.”

Figure 12. Dialogical Inquiry Model with Meta-cognitive Processes



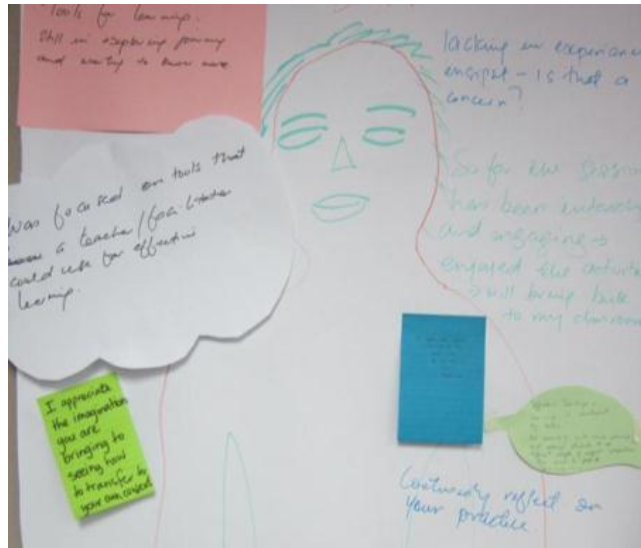
The third layer was to look at the teaching approach of building understanding through scaffolding the game from cognitivist/constructivist learning paradigms. Between each layer, each person was encouraged to write down the assumptions (on green paper cut-outs which look like leaves) that had been surfaced for them about teaching and learning. This generated a lot of thought although it was “hard thinking” for some. Just when the participants got comfortable with understanding a concept, we asked them to challenge it, thus encouraging people to both engage and explore an experience while also developing a critical stance to it, and being able to voice those tensions.

Figure 13. Assumptions about Teaching and Learning



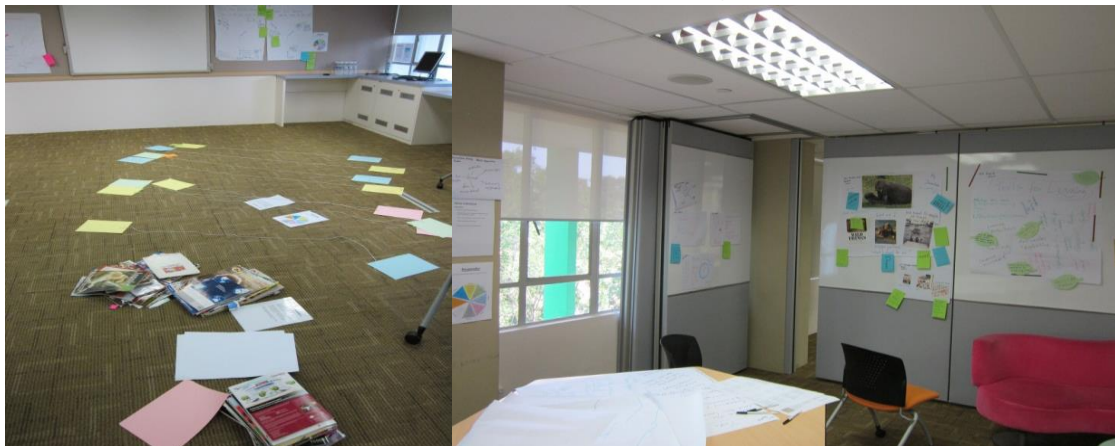
As a precursor to this activity we had asked the participants, in pairs, to create an outline of their partner on a big sheet of paper pinned to the wall. As we navigated through the different layers and activities, we invited people to put any insights or assumptions onto their profile sheet. Over the two days, they built up a visual record of their changes in thinking and feeling. We also invited others to comment through using sticky post-it notes.

Figure 14. Participant's Profile Sheet



The ecology room

Figure 15. Set-up of the Ecology Room



Following lunch, we offered, as a counterpoint to the dialogical inquiry activity, a learning experience we designed from considering teaching metaphors originating from ecological/complexity science paradigms. The content of this learning experience was for participants to explore their values, questions, paradigm orientations, turning points, tensions, notions of learners, learning and their relationships with their learners – key aspects of Shulman's (1987) teacher knowledges (see Figure 3). They were also asked to imagine turning around their assumptions and the possibilities that might emerge. We set up nine activities in the adjacent room to the one we had been working in (a standard training room set up with desks and laptops in a circle).

In contrast, the “ecology room”, as we called it, had some desks, a pink couch and cushions on the floor, with the different activities around the room. The participants were invited to choose activities according to their own interests, to navigate through them as they wished, to put their artefacts on the wall and give feedback on others’ artefacts through sticky notes. The activities carefully counterpointed each other to provide resonance, dissonance, playfulness, different multiple intelligences and learning styles. Collectively, the room began to gain a colour and dynamic that invited interaction and dialogue as well as gave private space – an eco-system.

Prior to people entering the room, we did a small guided visualisation to help people relax, clear their minds and orient themselves to the “ecology room” experience with a sense of openness to what might happen. Given people are often tired after lunch, and energisers are a usual strategy to get people back into the training zone, we deliberately chose an activity that respected the body’s need for rest, quiet and recharging.

Activities in the “ecology room”:

- Turning around assumptions
- Walking the tensions
- Write about a teaching incident moment that surprised you or challenged you
- What teaching roles do you take on?
- Who inspires you, and what are their qualities you want to bring into your teaching?
- What is learning, and effective learning?
- Create a collage to answer a question about what you value as a teacher.
- What do you value in your relationships with students?
- What intrigues you? Create a question cascade?

What arose from the ecology room experience astonished all of us and became a key turning point for the project, deepening the inquiry far beyond the pragmatic (though it took until the next workshop for the impact of its effects to be seen). The room itself was so different from normal training set-ups, and looked so vibrant when completed, that it attracted interest from other trainers and has subsequently been repurposed and used in other contexts to great effect. Paramount to it is the completely different view of learning and trust in the learner that it demonstrates. The selection and juxtaposition of the activities can stay within the pragmatic or technical, but have the capacity to open up to significant depths and generate different conversations.

A key activity we used is one where participants sit on the floor with a pile of magazines and ponder over a question in their heads (e.g. “What do I value about teaching?”), and then flip through the magazines, pulling out pictures that resonate with them without thinking too much about this. Then they create a collage and, as they do so, explore the deeper meaning that emerges for them from the pictures/metaphors. This bypasses the normal thinking processes. What was

revealed in our group was a deep concern for the heart and joy of learning, our relationships with learners, concern for the environment and greater world contexts, and questioning what we were living and working for.

Figure 16. Participants' Collages of what they Valued as a Teacher



The participants who mapped their preferred teaching roles against roles coming from different paradigms saw they were actually drawn across different paradigms, but often felt constrained within the *training* paradigm; there was no room for them to fully express their values. Some of them were very interested in exploring the teaching or curriculum metaphors named in the activities that they had little experience in.

In combination, the activities created a strong visual and written picture of desire for greater humanity, care and authenticity, and the tensions between these values and the current system.

The discussion following this activity enabled people to share their experience, what emerged for them in their own navigation through the room and what affordances it could offer for learning and thinking about learning. For many, it was something that seemed way beyond their current experience, but nevertheless, they were intrigued.

Performability

In the final session on Day 1, we looked at the maps of the different paradigms, and the participants discussed where they thought they might be oriented, where the system was and the mismatches as a whole group. It was slow and thoughtful, with many pauses. For some, this was “hard thinking”, but these maps were frameworks that we came back to again and again in the following sessions, so there was a recognition that it might be hard the first time.

To end the day, we threw it to the participants, as experienced trainers and designers, to come up with something they would use to close the day – a question or something. What emerged was very interesting. Someone said, “Would you come back tomorrow?” Everyone laughed, but also acknowledged that this was something many of us were worried about as trainers. Another asked, “What have you learnt?” And then one person said there was pressure to work out how effective the training

had been by getting participants to fill out a chart showing how their learning peaked or troughed during the sessions. Sessions where many people had the same low responses would then be reviewed. Some people gasped and this brought out the issues of performability and the indicators by which we choose to measure it. For example, would that last slow session be considered a trough to eliminate? Yet, it was important for future learning. Could it have been done better? There was further discussion on what we mean about learning and how to measure learning. Sue's reflections:

Normally I would be invitational of feedback around my teaching – checking in on how people were going and thinking - but in this context, I felt too terrified of asking in case I didn't measure up. I felt the weight of expectations for this course – and it seemed I had been subsumed into a performability paradigm. I also felt that the whole point of this workshop was to invite people into a space where they could explore themselves, and this would be destabilising, so asking them about the “effectiveness” of the learning was way too early. But on hindsight, I wonder why I didn't realise that there were far more important questions I should have been asking coming from an ethic of care. Later, on the weekend after the workshop, I was still feeling unsettled about this and the tensions I was experiencing, and I wrote a six-page critical incident style reflection (Brookfield, 1995) which revealed many useful insights, and which I later shared with the group in the second workshop.

Mindful participation

The following morning, time was given for reflection where participants could choose a set of questions coming from different paradigms (seeing how paradigm orientations shape the smallest learning design), and then share these reflections with a small group. The conversations were very deep and it became clear that the quality of thinking had shifted from the reflections just following the ecology room, as people had had sleep time to digest some of the experiences.

The resultant whole group conversation that emerged from this caused us (Helen and Sue) to throw away our running sheet for the rest of the morning (where we were going to get people to design activities based on different paradigms, in groups, using a world café technique with the intention of highlighting student-centred and teacher-centred paradigms), and to suggest time to explore what we really mean by tools for learning design instead. Two groups brainstormed on paper what they meant by tools for learning. Then Sue interrupted, and asked them to stand back and look at their assumptions, to write these down on the cut-out leaves, and then consider the question again.

What resulted was an expansion of the concept of tools for learning, challenging whose tools they were (student/teacher) and also whether they were attitudes and expectations to learning. The very act of thinking this through caused the

participants' faces to scrunch up, to look into the sky, to do deep thinking. Sue reflects:

Seeing the body language, I was desperate to know what was going on inside people's heads. I asked them to write or draw what was happening in a cut-out cloud shape I had just made on the spot and then share this with others. The energy in the room was incredible. Everyone seemed to be fascinated about what was going on in the heads of people and understanding the cryptic clues on the clouds. What was being shared were the tentative in-between feelings and thoughts, the tensions, the things we generally don't share with each other. It felt that this activity built a strong bond between people because of the glimpse into a deeper process of authenticity. Someone said "It is all about transforming ourselves."

We then unpacked what had happened in terms of teaching paradigms. We realised that Sue, in this case, was coming from a *teaching as conversation*, mindful participation paradigm. The teacher is concerned not so much for the individual but for how group synergies are enabling the emergence of something beyond the individual. The teacher cares for this emergence that is being created, intuiting moments for intervention (what are the assumptions here, what are you thinking) or holding back. Sue:

I asked the groups to stand back and consider assumptions because I had this strong sense that there was something more to be seen. I had no sense of what it was, but that the group had a capacity to go beyond into something new. I was going by intuition and creating interventions on the spot that might help this birth of something bigger than us.

Figure 17. Thinking Cloud



For many of the participants, this act of asking them to pause and stand back resonated with negative enculturated experiences of the teacher telling them they had done something wrong, that the teacher held the right answers, and was getting

them to move to where the right answers were. So it initially generated a sense of fear and wrongness – *what was Sue expecting in their answers?* This highlighted the issues in exploring or embedding new paradigms of teaching and learning.

How does each teaching and learning paradigm create a different relationship of trust between the student and teacher? In a *teaching as instructor or training* paradigm, students trust the teacher to have the right answers and to direct their skills and understanding to these. In a *teaching as facilitating* paradigm, students trust the teacher to orchestrate their learning with others

“Sue trusted us to find our own paths and meaning. I wonder, what would it feel like if all learning is like this? If I try that, would my learners have the capacity to fill the space? Does that question even matter? Do I need to worry for them?”

TLD participant

according to their needs and development and building their skills for self-learning, with the teacher trusting them on their unique journeys through the learning. In a *teaching as mindful participation* paradigm, students trust the teacher to be alert to the emergent possibilities of the whole of which they are an active contributing part, and the teacher trusts that their unique contribution is timely and useful to the whole. Sue:

I later had a long conversation with a Singaporean trainer who told me how learning only happens when the student trusts the teacher, and that only happens if they respect them. So the duty of the teacher is to build up respect first, then trust. In this project the meaning of trust became problematic. One participant, in his final presentation, talked about how I trusted them and that had been a key in changing his thinking about how he could relate with his learners. Helen thought trusting them might mean I had expectations that they could do this. But I think the word “trust” is a lot more layered and nuanced, and is part of a deeper issue in Singaporean culture as well as learning culture. What do we mean by trust, and what sort of trust is possible when we open up to other meanings of trust?

What was interesting in this off-the-cuff activity is that some key issues emerged around student-centred and teacher-centred learning that we originally intended as the discussion subject for the world café activity. It seems that by trusting the process and the members of the group, we trusted the content to emerge.

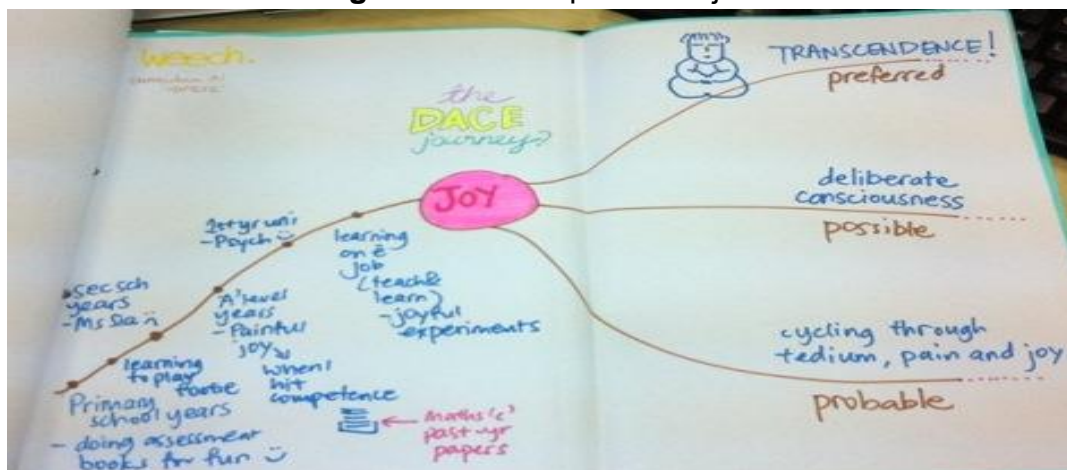
Following the “What do we mean by tools for learning?” activity, we asked people to reflect on their goals for this project. Many of the goals were around the notion of tools for learning or further self-reflection using the tools that we had introduced. However, by the time of the second workshop, the participants’ questions and interests seemed to have deepened or expanded. This may have been helped by sleep time and the homework question of noticing with different eyes what surprises,

intrigues, inspires in their own practice. This shows the importance of allowing a person's own inquiry time to develop, and to sit in the context of their own practice.

Workshop 2 – building capacity for practitioner research

The intent of this workshop was to help the participants frame a research question or concern, introduce them to action inquiry or practitioner research methods, build skills as critical friends and develop some understanding of the problematic nature of data and what data they might want to collect. In preparation for this, we created a practitioner research resource, pulling together some of the literature and our experiences and knowledge in action research, literature searching, data collection and interviews, critical reflection, integral theory research methods, seven ways of inquiry, and transformative learning.

Figure 18. Participant's Project



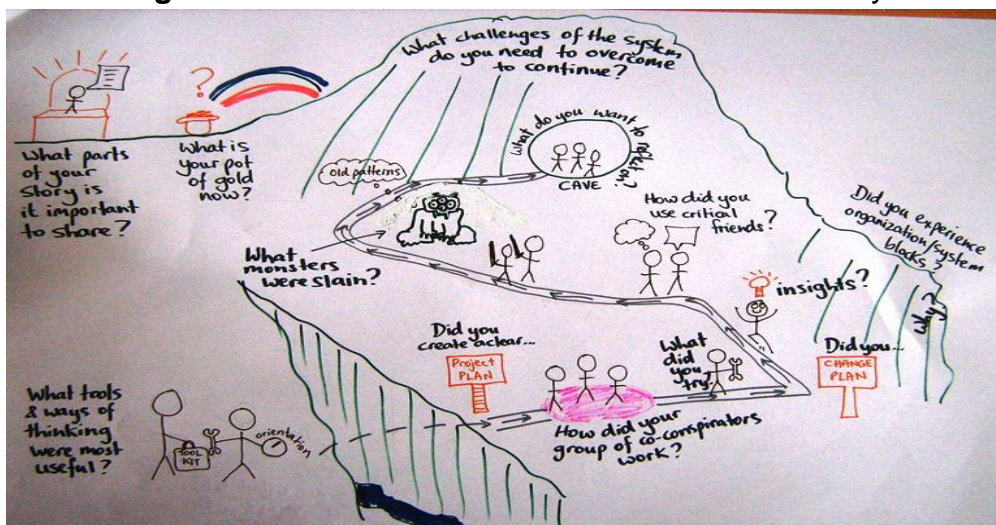
The workshop was designed to enable time for reflection, introduce different concepts followed by the participants applying these to their own projects using particular tools. They had plenty of time to work with critical friends from the group to help articulate what they wanted to do for their project, connect to their deep values, examine the historicity of their issues and to project into future possibilities. Their questions and concerns evolved over the course of the two days, expanding and contracting. By the end of the two days, the participants were beginning to write an action research plan using a *proforma* we had developed from Whitehead & McNiff (2009).

We had intended to give more practice on how to analyse qualitative data during the workshop. However, because of the diversity of the projects and the different type of data people were interested in, we decided to provide just-in-time and one-on-one help during the project phase of the programme. There is always a tension between how much one provides upfront, in building enough initial understanding and orientation to the pitfalls and rigour required of research, versus overwhelming people because it seems too complex and not do-able by practitioners. In the end, we found it better to encourage people to start with simple questions or ideas for

interventions rather than spend time creating detailed grand plans. What was important was the reflexive nature of the process, recruiting critical friends for the journey ahead, and expecting that initial forays into data collection might change the focus of their projects.

During the workshop, we let go of our original intent that people would be trialling a tool for learning as specific focus. While we provided the space, the collegial support and some tools for the participants to think about their projects, essentially, we were modelling a student-directed approach – giving ownership to the learners to create their projects and also asking what learning they needed to support that process. This took the concept of student-centred learning further than in Workshop 1 – providing quite a novel approach in the Singaporean training context.

Figure 19. Practitioner Research as a Heroic Journey



A highlight of the workshop was re-framing practitioner action research as a heroic journey. We asked people to form a semi-circle with their hands in front of them as a landscape for the hero to walk on, represented by a volunteer's two fingers. The volunteer hero, with the help of Sue, created a story of a possible journey involving overcoming the chasm of getting started, banding together with critical friends, meeting and slaying a monster, recovering and reflecting in a cave, deciding whether or not to tackle the system mountain to get the pot of gold at the end, which turned out to be something different than expected, and then declaiming the journey to others. This story was one that deeply resonated with the participants through the project, and which was referred to again and again.

Integral theory as a tool to name research stances

Figure 20. Integral Theory Four Quadrants
(Wilber, 2000)

I – Why I do How I experience, feel, think, believe, value, grow.	IT – What I do Behaviours, products, measurables
WE – Why we do Relationships, shared values, cultures, norms	ITS – How we do System dynamics, social systems, policy

In Workshop 1, a lot of system and cultural issues emerged. We introduced the Integral four-quadrant model as a tool to help explore these issues from different perspectives.

Integral Theory (Wilber, 2000) is a meta-theory that enables people to consider how they are framing issues and whether they come from particular ways of seeing and knowing the world. One of the dimensions of the theory is the four-quadrant model, with each quadrant representing a perspective or stance.

We chose to introduce this model partly because the participants, in the interviews, referred to qualitative and quantitative research without acknowledging that the stance from which one does qualitative research affects what one sees.

Many of the qualitative feedback surveys (or “happy sheets”) used in the training industry ask questions oriented to performance effectiveness (**IT-quadrant**), rather than engaging with one’s own transformative journey (**I-quadrant**) or engaging in dialogical inquiry with others in participatory research (**WE-quadrant**). The four-quadrant model helps to broaden our understanding of the stances and affordances of different types of research, and we found it a very powerful tool over the course of the programme.

Figure 21. Integral Theory Four Quadrants – Research Perspectives



In Workshop 2, we showed the participants how different data from Workshop 1 – some video footage, artefacts and also Sue’s critical incident reflection about the previous workshop – related to different quadrants, allowing limited glimpses of the “truth”. For example, how does this data help us to determine if this programme is effective, and is this the right question to ask? While Sue’s reflection (**I-quadrant**) came from an auto-ethnography research paradigm and helped the group see into her head/heart and to reflect on their own views and processes, her own view and interpretations remained different from other individual perceptions. So no single reflection or experience data can claim to be the “truth’. Further, while the video of the participants shows what they were doing and saying (**IT-quadrant**), it does not tell us conclusively whether the learning was “effective” because we cannot see inside the actors (**I-quadrant**). It was only a moment in time, and we are not sure how the creation of artefacts would lead to embedding them into daily work practice where the actors are navigating all quadrants.

However, for Sue, her reflection opened her up to new ways of perceiving possibilities for the group that resulted in the design of a number of activities for Workshop 2 and a change in her own orientation – so there was a praxis consequence. Her opening up to the group invited feedback and conversation about others’ perspectives that deepened an exploration of what we mean by learning, thus helping all actors to widen their views.

Although, this problematised the issues with data collection, it highlighted how data coming from different stances can open up possibilities, moving research beyond the question “*Is it effective?*” to deepening understanding, enabling praxis or greater appreciation of what it is that we value. Three participants became interested in creating auto-ethnographic reflective writing to be shared with others to encourage dialogue. It is crucial to provide models that enable people to discern the very real differences in what we mean by qualitative research, and how we need to take a more integral approach in weaving these together to develop nuanced, multi-purpose understandings and capacities.

We then asked participants to map their questions and issues pertaining to their project on the four-quadrant model with help from their critical friends. What were they missing that might be important for particular audiences? What aspects would provide novel perspectives? There was acknowledgement that one could not do a project that addresses all the methods across the quadrants within the time-frame, but the key was to be aware of your stance and methods. This helped people to contextualise their research.

Figure 22. Participant Using the Integral Theory as a Tool



Participant projects

For some participants, the first step of their project was to get data, others tried new interventions, while yet some others engaged in personal reflection. Some people changed what they could do because of constraints in their workplaces or with the Workforce Skills Qualifications (WSQ) framework. For others, as their projects progressed, the focus became clearer or more manageable. In Table 2 we list the key starting questions for the different projects and compare them to the final focus.

Table 2. Participant Projects

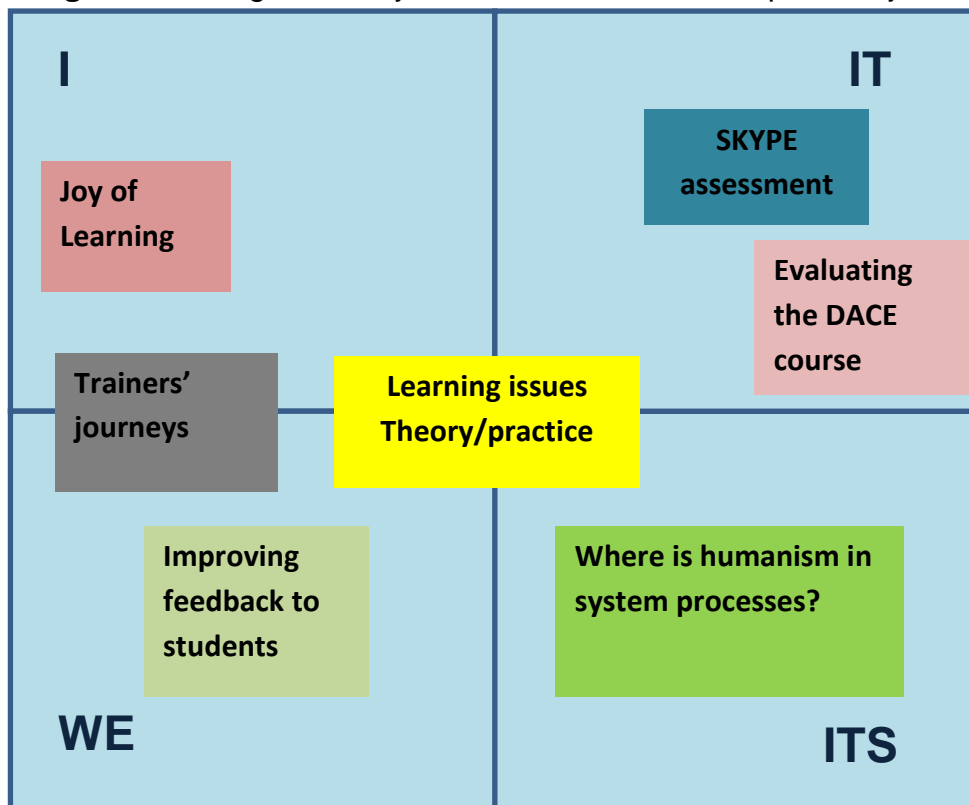
Project – initial questions after Workshop 2	Changing conditions	Final focus	Tools for learning used
<p>Bill</p> <p>How can the facilitator leverage on joy as the key driver for learning?</p>	<p>Personal reflections and sharing these with the learners enabled the notion of the authentic teacher to emerge.</p>	<p>How can I be joyful and authentic in my teaching?</p>	<p>Personal reflections</p> <p>Learner meta-cognition</p> <p>Ecology room idea</p> <p>Brookfield questionnaire</p>
<p>Philip</p> <p>What does peer assessment mean for learners? Does it help them to feel more empowered as learners, not subject to someone else's grading of them?</p>	<p>Peer assessment was initially too big a stretch for the students and required more time in the course than available for scaffolding.</p>	<p>How can I understand what my students are thinking? How can I make them more aware of their thinking? What am I valuing in their work and processes?</p>	<p>Meta-cognition</p> <p>Students' reflective questions about learning</p>
<p>Anita</p> <p>How do I and other lecturers think about critical thinking? How can I build critical thinking as a practice in our learning programmes?</p>	<p>Students out on clinical practice.</p>	<p>How do we give feedback to students in clinical practice? (Create a team of clinical practitioners to reflect and have dialogue together on feedback processes.)</p>	<p>Dialogical inquiry model</p> <p>Paradigms of teaching and learning</p>
<p>Michelle</p> <p>How does the learner become the trainer through the ACTA programme? What is a good teacher? Are there particular traits that make a good</p>	<p>Data gathering using an ecology room broadened the question. Aligning to PhD research of narrative inquiry.</p>	<p>What is the being and becoming of teachers/trainers? What are their journeys through the entire system and why do they leave or stay? How can the system support those journeys?</p>	<p>Reflective practice</p> <p>Ecology room (designed with new activities)</p> <p>Curriculum as currere paradigm as a focus for the questions</p>

teacher?			
<p>John</p> <p>What are the assessment methods or tools that can help the development of leadership capability in the level six Leadership and Management course?</p>	<p>WSQ framework requirements meant that tools that could integrate learning across and between individual modules required ongoing negotiation with the Singapore agency for quality assurance and there were concerns changes would not be allowed.</p>	<p>How can we use SKYPE in assessments so that learners can get assessments done from their work-places? (providing opportunities for those having difficulty doing professional learning away from work.)</p>	
<p>Jimmy</p> <p>How do learners' perceptions, attitudes, competencies change as they journey through the DACE core programme?</p>	<p>Requirements by organisational managers for rigorous and orthodox research methods shifted the way data was collected and reviewed.</p>	<p>What was the effectiveness of the DACE programme?</p>	<p>Using guided visualisations with focus groups</p> <p>Integral model in framing stance</p>
<p>Fettia</p> <p>How can I bring constructivism and humanism to courseware design?</p>	<p>Time constraints by the organisation meant the courseware design had to be rushed, with no time for interventions, and concern that the Singapore agency for quality assurance will not approve the changes.</p>	<p>What are the dynamics of the system that create obstacles to change?</p>	<p>Integral model in framing stance</p> <p>Paradigms of learning</p>
<p>Marie</p> <p>What is the trainer's perception of teaching and learning and how do they perceive that</p>	<p>Data revealed a number of issues around learning – the theory/practice divide, roles played, problem students...</p>	<p>How can we decrease the practice/theory divide through timetabling and use of technology?</p>	<p>Brookfield's questionnaire</p>

learning has taken place? How can we improve the learning?	etc.		
--	------	--	--

We mapped each project onto the integral model to illustrate the range of perspectives across the projects. Note that some of the projects are across more than one quadrant or perspective.

Figure 23. Integral Theory Four Quadrants – Participant Projects



During the 12 weeks where participants conducted their research, they were supported through Skype (video), phone or face-to-face conversations with Sue and/or Helen. These one-to-one focussed conversations proved to be key moments for learning, whether helping to better articulate concepts, come up with strategies for data collection, or to tease out understandings, issues and hone questions. Sue and Helen took on the roles of *critical friends* (helping participants to better articulate their thinking) as *mentors* (offering their own past experiences in teaching or research for consideration) and as *project facilitators* (minding the progress, clarifying the project intent, and looking at ways to help overcome obstacles.)

A key issue that surfaced during the project was the concern of the participants to know the outcomes we were expecting and what they needed to do to meet these. This very much came from a paradigm of *curriculum as learning outcomes*

(curriculum is a process of goal setting and drawing pathways to those goals) as opposed to *curriculum as experience* (learners create a learning experience according to its significance in their life and reflect on that experience to draw out learning.) There is a tension between performing for a teacher's outcome and creating a preferred outcome for oneself. We asked the participants to come up with their own sense of happy achievement from this project. For some, it was about seeing improvements in their students' learning; for others, it was about deepening their own understanding and opening doors to new ways of seeing things; yet for some others, it was about achieving a particular task.

Although our intent was to build a community of practice, supported by an on-line wiki, many did not have the time to use it effectively. Rather, the wiki became a repository for each person's data or thinking, with minimal interconnection between participants. Intrinsic motivation was not enough to get this working, and we are unsure whether the extrinsic motivation of assessment within an accredited course with specific outcomes (e.g. evidence of engagement in a community of practice) might have encouraged this more. Several of the participants who had the opportunity to engage in team conversations in their work place organisations also had difficulty in bringing together a group of people to do so. Thus despite the best intentions, the participants became isolated innovators.

Workshop 3 – presenting the projects

The final workshop was intended as an opportunity for the participants to share their research and get feedback that would provide closure or would assist in taking their concern further should they wish. It would also look at collective systemic approaches for bringing in innovation. Rather than making this systemic approach something that was done as a strategic session after the presentations, we looked for a process that enabled a weaving between the individual and the whole, so at any time, the individual could see her issues in context with a greater whole.

In contextualising the process, we invited the participants to consider themselves as co-researchers, and that together we would create a more systemic understanding of the issues of bringing innovative practices into the training sector. Each person was coming from a different part of the system and at a different level, representing particular cultures in Singapore and bringing different roles in both their life and work. Together, we provided a wealth of different experiences and perspectives to interrogate each other's journeys and findings. We asked people to name their different roles on cut-out head shapes.

Figure 24. Participants' Perceived Roles



What surprised us all was how people went far beyond their particular roles in work (e.g. training manager, a CET employee) or in their greater lives (e.g. wife in inter-racial marriage) to disclosing their emotional selves and needs (e.g. a tired and suffocating being stuck in the system, someone who needs to explore, someone who wants to contribute to community). A key issue was the fragmentation of selves, compartmentalising work, family and self needs. The last role the participants developed seemed to come deeper from themselves (e.g. my authentic self in the system who can be a bit of a joker, bright ideas and warm heart, discovering a new self, free flowing spirit, mother self who wants to nurture and care for others). The stories that the participants told of their roles and the tensions between them were poignant and deep. We found a new level of vulnerability, listening and appreciation of each other that shaped what was to follow.

To prepare the stage for the project presentations, we set up the room for Workshop 3 into the four integral quadrants with artefacts from the previous workshops, representing that quadrant on walls or the floor. We gave time for the participants to explore the room, and to add to it based on their experiences in the intervening weeks. Then four participants gave their presentations in the space, with each person of the audience deliberately choosing a position in the room coming from one of the perspectives, and then changing for each presentation.

Figure 25. The Integral Theory Activity



The audience gave feedback from their spatial perspective, though sometimes people were asked to move into the space that best represented their feedback when they were obviously not speaking from the space they were in. This built a deep awareness of the different stances and how they impact on what we see. It became very evident that the predominant discourse around training in Singapore comes from the **IT** and **ITS** quadrants. The juxtaposition of the different perspectives created interesting dialogues illuminating the tensions between the system and individual, culture and outcome requirements. We captured some of these in the participants' stories, showing how the perspectives reveal certain insights. A key learning for everyone was that where you stand shapes what you see and value.

Figure 26. The Tension and Dilemma Activity



The room was powerful in creating a whole group inquiry field, where each of us contributed a part to the whole, enabling deep listening, mindful participation and development of more systemic understandings. However, we realised over-night using presencing techniques (Senge, Scharmer, Jaworski & Flowers, 2004; Peschl, 2007) that the four quadrant approach was a limiting metaphor which corralled our thinking in certain ways. So the following day, we reconstructed the space as nested holons from self, team, organisation, system, nation, world and cosmos. This gave an alternative way of listening from another “whole”, enabling the illumination of other perspectives, nuances and tensions resulting from the dialogue between the different levels. However, this metaphor, while opening up new ways of relating issues within a whole, is also limiting; one person’s response was that she did not want to go into the circles because of feeling trapped. Having the room as a stage requires a quality of attention that extends beyond the self and we were surprised how, for some, identifications with a particular perspective provided an opportunity for profound contributions and insights beyond their previous contributions.

The presentations unfolded in a certain order, creating a much larger coherent story, with a number of resonances of particular themes emerging. The final person created her story by moving through the different holon levels to explain the tensions she was experiencing. The responses following this helped her to articulate her future strategies, drawing from the stories of everyone before.

Our original focus for this programme was to use the dialogical inquiry model as a framework to promote dialogue among the participants who were becoming more self-aware of how the dimensions of the model can be used to improve dialogue in their own contexts. While that worked to an extent, we also had to provide new frames from Integral Theory to help explicate different perspectives, and enable a dialogue through these. These frames were an emergent response to the context of the trainers – a solution that helped to name a missing part of the existing discourse – the WE and I – the interiority, *the human being*.

As part of closing the workshop, Sue posed the participants a question. They had asked for new approaches to be modelled through the workshop in the pre-interviews. She now asked them what aspects of the modeller (Sue herself) they would take away from the workshop. Each person offered one aspect of the following:

Courage, bring the human being with you, you can always learn new things, caring, facilitation skills, trusting your learners and self, clarity and awareness.

Perhaps this is part of the pot of gold that the hero finds at the end of the journey. This question is very different from “*What have you learnt?*” or “*How have you changed?*” It is about the qualities you value and wish to emulate – it is about the “who” of teaching (Palmer 1998). Sue was surprised she asked it, as it sounded very

immodest, yet it was consistent with the surfacing of the personal dimension in this project.

What next?

Following the workshop, it was clear a couple of participants were key to taking what we had learnt in the next steps. How might the stories and tools be used for a wider audience? It was also important that we debriefed people after some time had passed to see how things might have changed for them in their workplaces, and get participation or permission in using their stories. So for some, there was an obvious closure, while for others, there was a continuing relationship with different goals.

As facilitators how would we have improved it?

In emergent programmes of this sort, it is difficult to understand what it is actually about until the end. There are always things you wished you had done better, but in reality there are so many balls being juggled in the air that you are going to drop some. Whether your participants forgive you, and act to take up and carry those balls forward, is an indicator of the strength of the relationships and the degree of shared ownership for enabling the learning. Sue reflects:

If facilitating this programme again, there are things I would do differently. However, in doing so, I might be smoothing over some humps, only to create others, and the very act of embedding it as a programme that is done to others actually changes the very ethos that the participants valued about this – its emergent responsive qualities. What I most want to bring forward into other programmes that I run are some new tools, processes and understandings that help me to be better present to the individual as well as the collective. Further, I would like to have in place some system supports that might help participants to overcome organisational and system barriers and better engage in their projects.

Chapter 5 – The Stories

In this section we summarise the key themes of the different projects and then share in more detail 5 stories.

Summary of participants' projects

Bringing and humanism constructivism into the design of modules

Fettia originally intended to explore how to bring constructivist and humanist principles into the design of some new modules. Her organisation was in a process of getting a large number of new modules ready for accreditation with the Singapore agency for quality assurance. The limited time frame, the demands of the process including the amount of documentation required, and her lack of experienced staff meant that she could not create time and the team to consider the modules from these new perspectives. Further, she herself felt dehumanised by the dynamics of the situation. Her story highlights some of the barriers to change, and how although some ease may be found through one or two strategies (e.g. help by mentoring), sometimes it takes a much broader strategic approach to break the cycle of continued practice.

Joy of learning

Bill was interested to find out how the joy of learning can enhance learning in his classes. He used Brookfield's critical incident questions (1995) in his classroom to find out how learners (trainers in other organisations) were experiencing the module and the way it was being taught. He also reflected and journalled about his aims, dilemmas and experiences in his classes, which he shared with his learners. This resulted in increased openness, sharing and participation between members. As he let go of the expectation that he had to be perfect as a teacher and know all the answers, he became increasingly authentic. Bill built strong, meaningful and mindful relationships with his learners who deeply valued his authenticity and the modelling of different approaches to teaching. Through Bill's modelling of the vulnerable reflective practitioner, his learners were also inspired to deeply reflect on who they are as trainers and to involve their own learners in reflective processes.

Improving the quality of feedback for students

Anita began the journey to develop feedback skills of her nursing clinical facilitators by bringing them together. She asked them to reflect and write journals as they worked with students in the field. They used one of the workshop's tools for learning, the dialogical inquiry model, to prompt deeper reflection about the sort of feedback given. It became evident that there was a tendency to scold the students – to see them as having weaknesses to be corrected. By seeing this as just one paradigm of learning (teacher-centred), Anita could then consider other paradigms as providing

alternative ways to construct feedback, for example, student-centred (concerned with the development of students and their perspectives) and subject-centred (conversations that enable both teacher and students to gain new insights) paradigms.

Exploring peer assessment

Philip started with tackling the idea of introducing peer assessment in his course in programming in order to give students greater power in the assessment process. Through thinking about the goals he wanted peer assessment to achieve, he developed an understanding that teaching skills in small bits does not develop the vocational identity of being a programmer, but only develops an incomplete set of programming skills. He developed a set of questions to get insight into his students' thinking and experience of the course which helped him better craft his delivery of the course. Through the building in of conversations and reflections about learning strategies and thinking as part of student work, students have gained a greater awareness of the processes they use and are now able to see other points of view.

The being and becoming of a trainer

Michelle was interested in why and how trainers become trainers and stay in the profession, what makes a good trainer and what challenges do they face in their careers. She used one of the tools for learning processes, the ecology room, as a way of eliciting information from a group of trainers through their responses to a range of activities. The emerging rich set of artefacts, values, stories and perspectives surprised Michelle, exposing the human face and the importance of considering the being and becoming of the teacher/trainer when considering strategies for the professional development of trainers. This project helped Michelle weave together PhD studies. From these, she hopes to tell the stories of the being and becoming of trainers with her own work role in the professional growth of trainers.

Better assessment access through technology

John's original intent was to develop assessment tools that integrate learning across and between modules. The implementation of this idea fell through; he reported that it would require time-consuming and difficult negotiations with the Singapore agency for quality assurance. Instead, he introduced Skype as a means to save participants the trip to the provider's premises to undertake the assessment. Even so, for the pilot, participants had to go to the provider's premises because he understood that it would otherwise be a breach of the quality assurance rules that require face-to-face assessment.

Theory/practice divide

Marie initially aimed to get an understanding of her trainers and their students through administering questionnaires, which gave frank and illuminating answers. This highlighted some key areas that could be improved. One of these was the divide between the theory and practice of learning from having one day of practical and one day of theory, which was tedious for both students and trainers. A first step was breaking these into half days. A key insight was about her trainers – although elderly, they still had a desire to learn new things. This then opened the way for introducing the use of iPads in the practical classes for reference to theories and bridging some of the theory-practical divide.

Evaluation of DACE

Jimmy took the opportunity to design a multi-probe evaluation of the DACE programme which he had been partly responsible for in its delivery, design and management. Using a mixture of questionnaires, investigation of artefacts and focus groups, he collected evidence that suggests that DACE has achieved not only what it originally intended – developing the professionalism and capacity of trainers beyond the ACTA programme – but has also developed strong and enduring peer relationships and community of practice. These communities are important cohorts that can be targeted for continued professional learning and dialogue. Through the project, Jimmy was able to better articulate his own values and identify the need for the system to grow individuals to grow the system, and to see himself as the human face of the system, providing space for others to grow.

Five stories of participants' journeys

The following stories capture the journeys of five participants in the Tools for Learning Design research project. Each of these participants were engaged in their own practitioner research project. The stories aim to address questions such as:

- What is my concern and why?
- What are the tensions and contradictions that I am facing?
- What was my approach to exploring these?
- What have I discovered?
- How have I changed? What do I now value or understand? How has my practice changed?

The participants have kindly shared their emotions, vulnerabilities and difficulties in order to tell a larger story of the systemic constraints and cultures, and the nature of such transformative journeys. The stories are slightly fictionalised with changed names to provide anonymity and aim to express the authentic voice of the participants.

These stories can never give the whole picture of the individual, and may not represent the participants' views now at the time you read this. However, they do represent the views of the participants at the point in time they were participating in the project. The stories have been constructed by the researchers based on interviews, presentations, conversations, artefacts and field notes over the three months of data collection. In addition, each story has been vetted by the participant.

In reading them, we encourage you to consider how they cause you to reflect on your own experiences.

What new insights might they give about how people encounter and negotiate change, pedagogy, system constraints, their domain knowledge, others and their changing selves?

Fettia's Story – Bringing constructivism and humanism into the design of modules

Part 1: A scene in a workshop

Fettia:

*I am here today at our last workshop for the Tools for Learning Design project. We are supposed to present our project today. I almost wasn't going to come because I feel I have failed. I was not able to do my project. Sue has said to me that what we learn from **why things don't work** are as important as what we learn when they do. She asks me to speak up and tell my story and to trust that it has an important part in revealing the whole.*

I feel I cannot. I am mute.

In telling my story I will get in trouble.

It is too personal. I will be too vulnerable.

But something shifts for me in the morning session. We are asked to write in person shaped cut-outs the different roles that we play. I start off with the normal ones, my job description and then I can't help myself as other roles and other selves pour out of me... I have 10 cut-out heads with different selves scattered on the floor. I hear the stories of the others whose description of their roles surprise me – they are dealing with fragmentation between who they are at work and who they really are. I feel supported here. I ask Sue if she can help me to work out something to say for my presentation over the lunch break.

“I work in a training organisation. I am the link between the Singapore agency for quality assurance and the courseware developers in my organisation. I have to make sure our WSQ modules are up to the standards of the agency, and that all the documentation is filled in appropriately. I need to ensure the designers get the courseware developed within the timeframes. I work with the designers to help them understand the parameters.

“In the past, our curriculum was developed primarily to get accreditation to meet all the agency's requirements. There is not much thought put into different learning styles or the developmental aspects of learning. The framework is skewed towards reinforcement and conditioning to bring about desired behaviours and transfer knowledge. It does not encompass the learner-centred paradigms of humanism and constructivism.

“My project is to explore **What does it mean to bring more humanism and constructivism principles/paradigms into WSQ courseware development?** However, I am not able to do my project.”

Sue: Last Friday, Fettia and I sat outside, our first real meeting in several months. She is here on a course but missed a session to talk to me. Everything seemed to pour out of her. Her situation at work instead of becoming better is becoming worse. She told me story after story of the way she was being treated and shunned, and how she is becoming a person she didn't like to be. A monster. She feels she is losing her human being-ness. The web she is in is so entangled that there are no easy answers or ways forward. Even cutting the web and leaving the situation is not the easy solution it first appeared to be. Changing herself, acting differently, developing more personal capacities might not be enough. So embedded are systems, behaviours and the ways her workmates have of framing who she is and can be. At one point in her story, a most horrific moment, I reached over and held her hands. I felt her pain, her helplessness and tears ran down my cheeks.

Fettia: No-one had ever cried for me before. I felt cared for. Seen.

*Sue: So when Fettia asked me to help her to work out a presentation for the group over lunch, I asked what she would be comfortable sharing. "Not the personal stuff." For me, her project isn't telling us so much about the issue of putting humanistic paradigms **within** the teaching modules, it is a bigger story about the dehumanising aspects of the system. I wonder what are the mechanisms of the system that created this "cog" who could become and be seen as a monster.*

Fettia: We sat down together over lunch with a big sheet of paper and worked out the causal effects between particular policy, action and behaviours. At first I saw the Singapore agency for quality assurance as the problem with their requirements and their deadlines. However, I now see that part of the issue is that my courseware developers don't have the skills needed to be able to fill out all the forms and the requirements, leaving me chasing them up constantly and working late hours trying to fill in the gaps. But why don't the developers have the skills? They have ACTA certificates in doing this? But competence in a training course doesn't mean actual competence in the workplace. There is a gap. Whose role is it to build our people's capacity? How can we innovate in creating the courses when time is going into meeting these skill gaps in providing the course documentation? I am beginning to see more nuances in the system and feedback loops that emphasise different behaviours. The ACTA assessment modules act to shape us rather than grow us. I am hoping that by explaining it to the others, they can see how we can create a better system.

(During the presentation)

Sue: As Fettia presents her model to the group, I can see her getting excited. As she tells it, she seems to be internalising it, and beginning to think about her situation in a new way. I wonder if this system analysis perspective is helping her to re-frame her issues.

(Immediately after Fettia stops speaking, a harsh voice speaks up.)

“Stop complaining girl, you have your work to do, you have to do it. We all have to do it. If we don’t do it, the system won’t work. The system is there for a reason. You need to be organised.”

Sue: Fettia’s jaw drops. She looks in shock. She looks at me. I had set up the room to spatially represent different perspectives or voices and each of us in the project is sitting in these perspectives, listening from that perspective ready to give our feedback. I am sitting in the “system dynamic” perspective. I realise that Fettia is getting feedback from an aspect or voice in the system. What is it? The voice of outcomes, of getting things done, of continuing behaviours unquestioned? How often does Fettia hear this voice? It is not the one she expects to hear in this group where we are normally so supportive of each other.

(Another voice speaks up.)

“You might feel squeezed by the system, but that is just your perception. Others, like myself, can find freedom within the system to do what we want. We push a little and create room for ourselves. In fact, even now, I am someone who is creating part of the system. You are too, you are creating some of the system there in your workplace, you can change that, build capacity of your developers.” (*Voice of actualised person within the system?*)

(Fettia’s body tenses up, her face seems to cave in.)

Fettia: “You may have made room, but there is no room for me. You just don’t understand what it is like.” *Her voice rises in pitch.*

(Another voice speaks up, coming from the side of the room representing the inner self.)

“I hear in your voice something much deeper than what you have described here. You have given us an analysis of the system but you have left out yourself. What does it mean to put *yourself* in this? What is the root cause of your frustration? What is the impact on your career?”

Fettia: “I have the passion in terms of developing curriculum, but with all of this going around, I have to ask, *do I want to do this?* I believe in humanism yet I have been dehumanised. The way people have treated me. The way I behave – a monster. I hate who I am, I keep getting sick. I can’t leave to do something else, something that could be worse – I have to support my family. I am trapped. I am feeling myself disappearing in that place. The self I like is dead. I want to be my natural self, the one that can laugh and grow.”

Tears start rolling down her eyes, tears she couldn’t cry when talking to me. She walks over to the Inner self voice as she is talking and sits down and they hold hands, leaning towards each other.

Inner self/counsellor voice: “I hear your pain. You have been going through a tough time. It seems like you are at a crossroads. What helps at this moment is often a mentor who can help you preserve your passion and make it work to advantage within the system.”

Fettia: “Could you be my mentor?”

Sue: Fettia is now calm and hopeful, but as facilitator, I know there is more here. I ask the counsellor/mentor to leave, and Fettia is sitting alone on her chair. She looks bereft. I ask the cultural voice to speak up.

“I listen to the undercurrent of your story – I have heard it before, listened to it before. Your story is one of so many within our system. People with battle scars; many who cannot find a place where they can bring the whole of themselves, where they can be seen and valued. People who get sick by being suffocated and eaten up in the system. We become powerless, and feel there are no parts of the system in which we can have some control and no place to express our passion. In Singapore, we operate in survival mode. We often don’t ask if we have a choice. We don’t often have the space to realise we might have a choice. It becomes a vicious cycle. It is important that these stories of the individual in the system are recognised as a cultural systemic phenomenon, not just for individuals to solve by themselves.”

Sue: Fettia is still looking shell shocked and bereft. This cultural perspective voice does not speak to her right at this moment. She wants the counsellor, the healer back. The system analysis perspective is left abandoned on the floor.

PAUSE, REFLECT: What perspectives might help Fettia now? What perspectives might help others like her?

Fettia – my roles:

- I am an individual working within the WSQ and CET system
- I am an employee at a CET centre
- I am a curriculum developer
- I am a link between my company and the Singapore agency for quality assurance to accreditation
- I am working with associate developers
- I am a learner who is curious and eager to find new ways of doing things
- I am a learner in ACTA who is hearing a lot of negativity about the system and the standards
- I am a learner who is puzzled by the rigidity faced in the system
- I am a suffocated and tired human being stuck in the system who would like to explore and experiment
- I am discovering a new self

The transforming self/transforming system voice speaks up:

“When I was in China, standing on the beach looking out at the Pacific Ocean, I began to get a sense of how big the world is. I thought there has got to be room in that world for a little guy like me. It is not just about having a system in Singapore which supports us [as] we grow old. It is about growing. How can we help to grow the system that can help grow us? For me, when I experience a sense of liberation within me, an ability to express my values, I have a power within me to help grow the system that can help grow me. If the system does not grow me, then something is wrong.”

PAUSE, REFLECT: What might it mean to grow a system that can help grow people who can help grow the system?

Part 2: Continuing journey

Sue: It is now 3 months after the workshop. I rang Fettia and asked how she is going and what may have changed for her. She is still experiencing difficulty in her organisation and the way she is being treated by employers and work colleagues, which is affecting her emotionally. However, because of her increasing professional contacts outside the organisation, through this programme and others she is pursuing, she is now developing a better understanding of what is fair and reasonable for someone in her role, and is gaining confidence in her own experience and knowledge. She has found mentors from both the Singapore agency for quality assurance and IAL she can go to for advice, and they have helped her navigate through some tricky system issues as well as referring her to personnel she can consult for course design. She is feeling a lot more confident in understanding and navigating the system; the advice of the agency mentor means she can better

discern between seemingly conflicting messages from the Singapore agency for quality assurance. She is enthusiastic about furthering her own professional learning through DACE and Masters programmes, seeing that she has something to offer her industry. Her feeling of being squeezed on all sides has eased off a little. She no longer identifies with “a “soul” who needs help.”

Although Fetta has not completed her intended project to bring humanism and constructivist approaches into her courses, she has made herself the project. Perhaps humanism in action is enabling people room to grow and flourish, to express their humanity.

PAUSE, REFLECT: What is this humanity? What does it mean to be human in the system?

Bill's Story – The joy of learning

My son hates reading but loves dinosaurs. But he picked it up. I gave him books on dinosaurs and apps and models. He took a joy in learning, nothing was forced.

It got me thinking, why is it when you are young, joy in learning is easily accessible, but when you are older, other things get in the way. How can we appreciate the joy in learning?

I am a trainer and courseware designer. My learners range from novices to experienced trainers across several industry. I am concerned about the feedback from the first batch of graduates that the journey has been an exhausting one – no breaks, tough assignments, practicum and capstone project all consuming. By the time I see the learners in the later units, they seem dead; lights are on but no one is home compared to the bright-eyed and eager people who started out.

I believe that learning should be life-giving and joyous. But now I operate in a Workforce Skills Qualification (WSQ) environment, pre-occupied with coverage, evidence, outcomes, standards, mandatory qualifications, training numbers, training and assessment specs. There are corporate logo-themed slides, thick learners' guides and tie-wearing assessors and trainers.

What might it mean to facilitate joy as the key driver of learning in a learning environment? How can I bring in more humanist perspectives? How can I create happier learners in the learning zone? How do I better understand my learners and what brings them joy in learning? What class cultures and relationships foster joy? How can I challenge some of the system constraints and competency paradigm to create some space for joy in learning?

Gagne suggests nine events for learning. I will share nine events of my own learning in this project.

Event 1. Sue's Tools for Learning Design workshop. She threw all assumptions about training on its head and introduced curriculum metaphors and meta-learning. Possibilities about training and learning expanded for me. How can I leverage on joy of learning? How can I encourage meta-learning?

I feel recognised for who I am. I was drawn deep. She trusted us to find our own paths and meaning. I wonder, what would it feel like if all learning is like this? If I try that, would my learners have the capacity to fill the space? Does that question even matter? Do I need to worry for them?

Event 2. I started my inquiry into joy in learning in very small steps. I administered Brookfield's questionnaire to my learners after the first three sessions. Questions included: what moments have surprised you, engaged you, distanced you, helped you, confused you? I also asked what gives you joy. This was a hundred times more useful and robust than the usual happy sheet. I got a peek into my learners' psyches and motivations. Very quickly, I realised that what gave them joy is that they are in a community of learners, sharing, laughing. I told myself I need to make space for this to happen, to take a back seat in this.

Event 3. As I went along, I started doing some post-session reflections about my own teaching which I emailed to my learners – what I was trying to do, what I felt didn't meet my intentions and where I would like to improve or inquire more into. I felt encouraged to try this after Sue shared her own reflections with us in the workshop, helping us to see into her processes, assumptions, dilemmas and resulting development of learning strategies. My original intent in doing this was to help the learners focus on the processes behind my facilitation rather than the content. You know, trainers being trainers, they are fixated with content. I wanted to move them away from that and encourage meta-learning.

But quickly, the responses that came did not talk about the *process* of facilitation that I was inquiring into, they talked about other things, like authenticity and bravery. They asked, "How can I make myself vulnerable like this?" They wondered how they could find the courage to do this reflective sharing with their own learners. Should they do this? What can of worms would be unearthed?

To me it didn't seem like a big deal, but to them, it was. I thought if I don't try it now, when will I ever? I also felt confident that the learning intent in making my processes open would be recognised by the learners. And I really enjoyed writing those reflections. They were long, but I like writing, not for assignments but for writing's

Questionnaire:

1. *At what moment in the session this week did you feel most engaged in what was happening?*
2. *At what moment in the session this week did you feel most distanced from what was happening?*
3. *What action that anyone (facilitator or classmate) took in class this week did you find most affirming and helpful*
4. *What action that anyone (facilitator or classmate) took in class this week did you find most puzzling or confusing?*
5. *What about this class surprised you the most? (This could be something about your own reactions to what went on, or something that someone did, or anything else that occurs to you.*
6. *Was there any point this week that you felt joyous about learning? Please explain.*

Questionnaire adapted from Brookfield, S. (1995)

sake. Somehow the learners caught that. First peek into what joy means as a driver of learning – *I need to be joyful first, or else how can I expect my learners to be?*

Another interesting impact of sharing my reflections was the deepening of relationships between us, a greater sense of trust and willingness to share more authentically in class our stories. Some took the opportunity to inquire deeper into the different meta-layers, who we are as trainers, what is going on behind facilitation and learning. I took the opportunity to grill them on what they were seeing, their perspectives on this, and it helped me see deeper into the learning, the relationships and the learners.

Event 4. The nadir. So after these three weeks, there was a huge impasse – lots of work (studies, family), feeling very tired and very stressed, waking up at 4am, nothing in my head. I knew something was wrong. So I think all the joy disappeared. It was all chaos and tiredness, and that showed because I think there was a dip. And during the 10-week module, there was one too and it showed. I became more cranky.

At work we need to be strong, to show output, improvement and no weaknesses... it is all very tiring.

Event 5. I read an article about Confucian culture and how Confucian values have permeated learning, and discouraged the joy of learning.

“Chinese people believe that everyone can succeed in their studies if they make the effort. Thousands of case studies have confirmed this view. Research has revealed that the majority of adults in China participated in learning through external motivation (Zhang and Hu, 2002) – very few adult learners studied through intrinsic motivation. The result is that when their studies have been completed, students consider not studying further because learning caused them great suffering. In a lifelong learning society, however, learning is not an event but a lifelong process. If learning is painful, people will not feel happy and continue learning throughout their lives. In order to establish a lifelong learning culture, the learning effort and learning enjoyment need to be combined.”

From Zhang Weiyuan (2008) – Conceptions of Lifelong Learning in Confucian Culture

We always hold the teacher up to impart knowledge to us. There is a lot of respect. It is all good but at some point, something goes missing. We start to see learning as a task. Suddenly, reading this article, it all made sense – the dilemmas, the tensions between needing to be the subject matter expert and wanting not to be all the time. Enculturation! So I asked, *“Can I free myself from these shackles?”*

I always thought I needed to be seen as a perfect role model, delivering the most innovative or interesting types of facilitation for maximum learning. Now I don't need to be perfect – I can be authentic. I can choose when to admit that I am not perfect,

that things could have been better. What gives me the confidence to do this? It feels right.

When I ask what it means to bring joy into myself, it lightens me up, it enables me to be authentic. Bringing joy into myself allows for authenticity. When I am authentic, I give permission for my learners to be as well.

Now when I Skype my learners to talk about their mock facilitation, I want to ask: How can you not see this as an assessment, but rather how can you bring life to the design? How do you bring your authentic self to the design?

Event 6. During the 10-week module, there was one session where I Skyped a learner late at night, who had attended a previous module that I ran. He told me off the record “You know, you asked for feedback about yourself. I will tell you this. The previous module I met you, you appeared very distant, the teacher on a pedestal. But this time round, I found you a lot more down-to-earth. As a result, your credibility increases.” I thanked him for sharing, and was more energised and convinced it was ok to be me when I'm training. I am no longer on a pedestal, I can be myself.

And by being myself, I am noticing more. Last session, I was preparing in the room, writing on the board and getting the task sorted when a student came 20 minutes early and asked for help. I was in task mode and said can we talk while I am doing this. He said “I'll go get a coffee.” I stopped and realised that I needed to switch out of task mode and connect with him. So I sat down face-to-face and we talked through his issues. When he did his feedback, this was the thing that brought him most joy – it all happened before the class began. It has made me realise that I get caught up in my thinking and tasks, and I need to be attuned to the relationship side. Take a more mothering role. Explore this role, listening in to when I need to do it.

Event 7. The computer crashed. I lost everything – all my emails, data. I thought it was a sign that I could leave the past behind and start afresh. Free of baggage, free of conventions. I felt quite strangely liberated to be honest. Also, it was a test of the evolving clarity I was slowly developing. What were my reactions? After I sent my computer to the IT department to try to salvage it, I was asked to go for lunch while they worked on it. I left the building and looked up. And took this: I felt my mind clear up.

I like to look up when I drive or when I walk. It could have been a hectic day, and I just need to look up and sometimes those few seconds are all I need to help me cope. I see the sky in all its incarnations, I see the clouds and see meaning, shape. I see the branches of a tree at sunset and it's like Nature's Jackson Pollock. I see light streaks, rushing into a flourish. I see the truth, and I am deeply humbled. There is clarity, there is joy and there is noticing.

My research method, I suppose. I did it a lot during this project

Figure 27. Participant's Metaphorical Illustration



Event 8. That 10-week module continued, there were three weeks where the learners took over and did practice facilitations. Their classmates pretended to be a particular audience where they reacted from a role, but they were not very good at that – too polite. Usually I would sit at the back, observe, take notes and do the debriefing, very much the expert teacher, judging their performance. This time around, I decided I would participate as well. I told myself to join in, have fun, play, take on a role and act from that role, so that the “facilitator” had to react and improvise. I got playful, enjoyed myself and the atmosphere became even lighter than before.

Initially they asked “How come, why?” I was ribbed, made fun of, but somehow I retained control of the sessions. At certain points, learning was entirely self-driven. Others began to play as well – it became play-like. The power flattened out. I became one of them, it was authentic. It wasn't me sabotaging, clowning for no purpose, it had a learning purpose. I made sure I was *with them*. There were disagreements, both in opinion and character, but everyone was in forgiving mode. My expressions were scrutinised, and if I even frowned or showed negative body language (they didn't know it was mostly borne out of tiredness), they would tell me. It was a reminder to myself – *I need to be joyful, for it gives them permission to be as well.*

Event 9. Conversation with Sue. Unpacking what has happened. Where am I now? Have I changed and what is it I have changed to?

I no longer wear ties.

I am in a place where there seems to be an alignment with everything. I have become comfortable with all aspects of my life, in being me. I have certain strengths, but I can be a human being, with weaknesses, when I need to be.

I am teaching a module using principles of transformative learning where in the typical Singaporean fashion, you are told to give the class a powerful video, something to break assumptions, to initiate change. Follow this procedure and transformation will happen! But for me transformation has snuck up, I am still at the larval stage.

I have come to *realise it is me being aware of myself.*

I will be myself, I will be as meta-cognitive as I can be. *Authenticity and awareness.*

I think I have always been pretty self-aware and authentic, but I have moved to a new level. You struggle for a while, hit a purple patch where everything clicks and then the cycle begins. Perhaps I am now more conscious of this as an important part of me being a joyful teacher.

Some of my learners see what I am doing, and they are very inspired, but then there are others who are provoked and puzzled by me doing this, they ask “Why are you who you are?” The responses at the end of the module reflections by most of my learners were far deeper and longer than the usual “happy sheet” responses. They were deeply reflective, deeply appreciative of our collective learning journey.

I am beginning to notice how every person I come across comes with motivations, fears, preferences that are very deep-seated, and which I would never be able to uncover very quickly. As a result, I need to find out, I need to give it some time ... I don't rush into things ... we must do this or that. When I am working with groups, I am watching the process, watching my own opinions, when to hold my tongue and allow the space for conversation to flow and deepen, and when to give my opinion or to steer it. As a result we are not covering the content in order, and often we are going a lot deeper than is required as it is now connected to real obstacles and issues that people are experiencing. We are inquiring together.

Some people look at me and wonder when I will intervene, but I let them know it is okay. I am thinking “It is who you are and you will find your way. I trust that you will find your way. I don't need to be the god, I don't need to hold your hand all the time.”

Although I don't believe anyone is coming from a clean slate, some people believe that they are a clean slate. They want more structure, specific knowledge. I find myself giving them what they want through emails, before class or in breaks. So when they need a hand for a while, I am there. But not in the same way as before – standing up in front of the class and delivering the answers.

In my training module, I had three quality assurance assessors come in at different times to audit the course. The first one, a previous teacher, looked at what I was doing with a smile on her face. She said something important is happening here. It is not following the schedule but it is really good, special. The other two looked at their review forms and I didn't conform to them. They didn't see what else was happening, the opening up of people, the connecting to their own lives and work, the deep inquiry and transformation.

For me, my happy sense of achievement for my learners is that they become open to possibilities and they are able to explore these for themselves, not waiting for someone to tell them how to do it, "Here is this strategy." When they recognise they have the power to be explorers that makes me very happy.

I think I am an explorer as long as I stay open, as long as I am comfortable, being myself, things will open up and appear. For example, I may not know about data coding now, but if I do want to know it, things will open up. My mind is receptive to anything... my antennae are all up. Whatever you need will appear. It is the realisation that you CAN if you are open up enough to want it.

I am also beginning to see my daughter and son more differently – a lot more peace and laughter at home – it is quite radical. But sometimes, I relapse to being my old self – frowns, tensions. For example, my daughter asked me to help her study for her exams. We had no practice exams at home. I was initially panicking, then I relaxed, feeling calm and aligned. I recognised her for who she is – bright and hyperactive. What materials would help? I don't need to be the parent who knows everything. Let's find out together. Now that is absolutely stress-free. Attending to that moment, what can we use right here, right now, antennae up....

The clarity from joy of noticing

It is about noticing.

Noticing myself, my responses, my fears, my joy.

Seeing them and letting them go.

*Moving into an empty space, like the sky, where there is nothing,
but also where there is everything.*

*Only then can I notice other things –
my family, my learners, my colleagues, my friends.*

With noticing comes clarity.

With clarity comes joy.

*Joy not always in exuberant form,
but equally joy in being serene, being aligned.*

Joy that shouts but is silent.

Joy that knows that it doesn't.

It starts with me.

Anita's story – Improving quality of feedback to students

Giving feedback is an emotional activity for both the instructor and the student

I am a lecturer and course manager with a Polytechnic in Singapore. I am responsible for the three-year Diploma of Nursing, managing staffing, assessment, curriculum design and review. My original *action research plan* was to explore how to build greater critical thinking into the learning programme.

The students spend 50 per cent of their time learning theory and 50 per cent in clinical practice in a hospital. Our intent is developing an independent learning environment to groom thinking nurses, especially critical thinking nurses. However, this new generation says, “just tell me what I am supposed to study, and I will study and tell you the answers you want”. Some lecturers give the answers, others try to encourage independent thinking.

Critical thinking does not come automatically. It needs to be developed, and requires effort on the part of teachers to help their learners think critically. Teachers must also learn to think critically. I was keen to work with a small group of teachers to trial a programme of developing critical thinking using specific learning tools, such as the insight/dialogical inquiry model from the TLD workshop. Key questions: What is my perception of critical thinking? What is the perception of critical thinking among nursing lecturers? How is critical thinking facilitated to their teaching of nursing students?

But due to the semester schedule, students were on clinical practice for the duration of the TLD project. So I did some rethinking about what was needed there. What could consolidate their learning while they were on clinical practice?

How can clinical practitioners provide effective feedback for students?

How can feedback encourage student self-reflection, raise self-awareness and help students plan for future learning and practice?

How is feedback currently provided to nursing students during clinical practice?

What are the underpinning ideas that guide lecturers in providing feedback?

Background

Clinical practice is an essential component of the nursing curriculum. In order for the student to benefit fully from the experience, regular performance feedback is required. Feedback should provide the student with information on current practice and offer practical advice for improved performance. The importance of feedback is widely acknowledged. However, there is inconsistency in its provision to students.

The benefits of feedback include increased student confidence, motivation and self-esteem as well as improved clinical practice. Benefits such as enhanced interpersonal skills and a sense of personal satisfaction also accrue to the supervisor.

Barriers to the feedback process are identified as inadequate supervisor training and education, unfavourable ward learning environment and insufficient time spent with students. In addition to the appropriate preparation of the supervisor, effective feedback includes appreciating the steps in the feedback process, an understanding of the student response to the feedback and effective communication skills.

Nursing is a practice-oriented profession. The teacher practitioner model is one in which students learn best from individuals who have dual roles as lecturers and as clinical facilitators. The clinical facilitators who are faculty members of the teaching institution teach the students in the polytechnic and also direct the clinical interaction with clients in the healthcare area through modelling and guided practice.

Many nurses and nursing lecturers become clinical facilitators without realising that time is required for the transition to this role. Part of the transition is learning the duties and values of the role which helps new clinical facilitators teach students effectively, thus providing quality care to patients.

Studies show a number of barriers to giving effective feedback in nursing education, such as:

- fear of upsetting the trainee or damaging the trainee-lecturer relationship
- fear of doing more harm than good
- trainee being resistant or defensive when receiving criticism
- feedback being too generalised and unrelated to specific facts or observations
- feedback not giving guidance as to how to rectify behaviour
- inconsistent feedback from multiple sources
- lack of respect for the source of feedback.

Currently, the academic school suggests that lecturers providing feedback should:

- ensure feedback is delivered during or as soon as possible after the event
- make time, give full attention and ensure privacy
- support the student to self-assess
- written feedback is useful
- be constructive, negative comments should be learning points
- be objective and specific
- use open-ended questions and give reasons for your comments
- clarify any problems
- ensure the student understands what is expected of her
- inform the student that other staff may need to be involved

- develop an agreed action plan if necessary.

There are many explanations for the paucity of feedback in clinical nursing education. The first and most obvious explanation is the failure to obtain data, for example, to make first-hand observations of a trainee's performance. Observations are the currency of feedback, and without them, the process becomes feedback in name only.

Why this is important to me personally

As part of the first workshop in the Tools for Learning Design research project, I did a short reflection about an incident that has stuck with me. Although at the time I was thinking my project would be around critical thinking, it is interesting that the incident that most struck me was one about feedback:

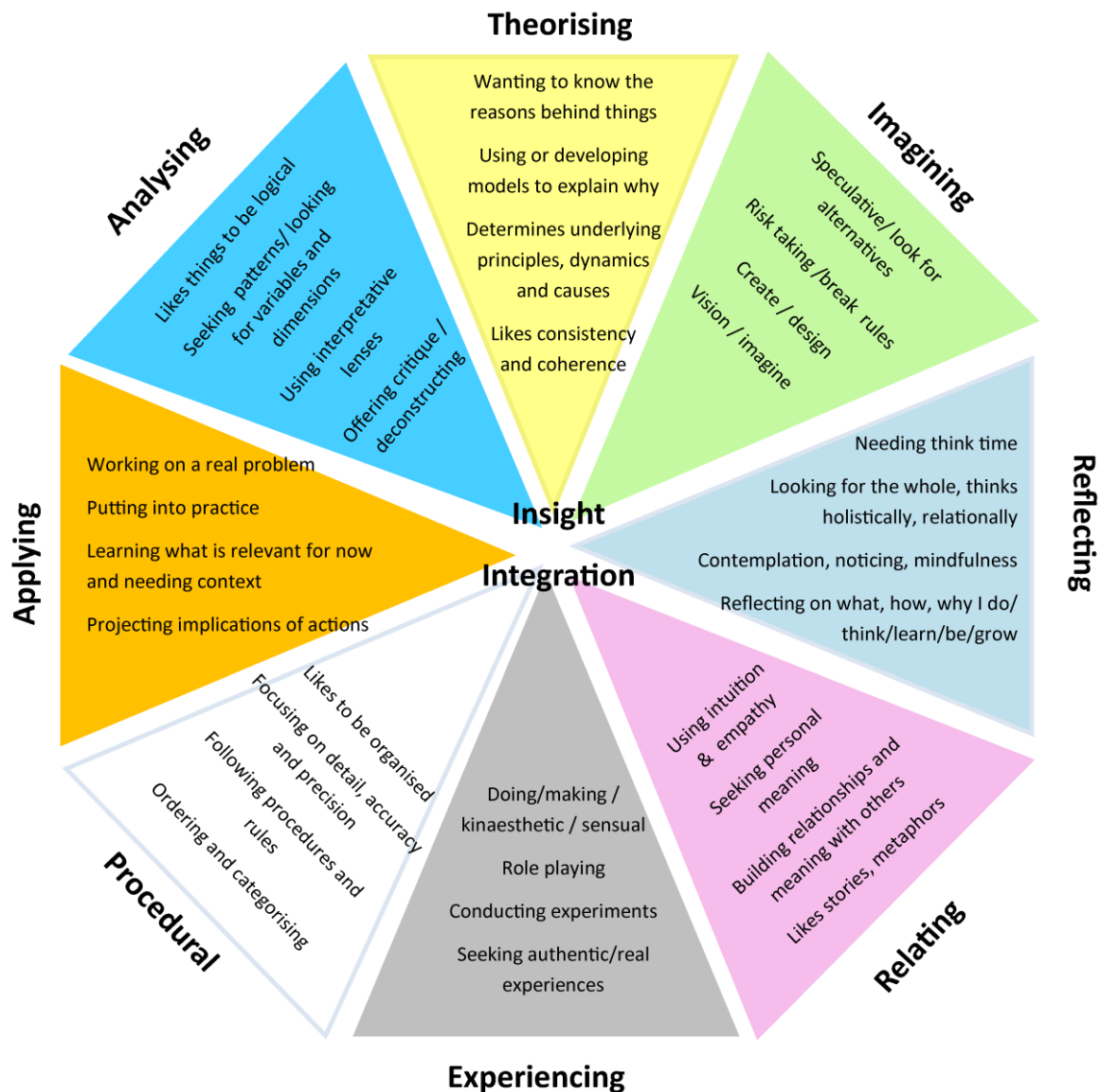
A student whom I was facilitating during her clinical learning made a complaint about me – that I was “physically” harsh on her for not keeping up with her objectives for clinical learning. Though my approach with her was basically an intellectual discussion and not a “physically” harsh approach, I was asked to apologise to the student.

On reflection, the student could have done this to hide her incompetence or she might have perceived me to be too demanding. I am more cautious now of students' feelings and doing my best to understand them better.

My research project

Because I wanted to work with practitioners new to the system, I identified five clinical practitioners, who had only been three months in the clinical supervision role. I asked them to keep a daily reflective journal for three weeks on their feedback to students. However, without guidance, journals often become diaries that simply contain facts rather than analytic tools for learning. After sleeping on it, I realised that the insight/ dialogical inquiry model I had intended to use as a tool to encourage critical thinking might be a useful framework for them to structure their reflections and construct deeper meanings.

Figure 28. Dialogical Inquiry Model



I provided a short briefing for the team on the integrated insight/dialogical inquiry model (Figure 28), but I realised that I myself didn't understand it fully. And when some of them looked puzzled, I said to use any reflective questions that would help them. Time was of the essence. With more time, I would have been better prepared and could have developed their understanding further.

I organised a reflection sharing session for the team at the end of the three weeks. Written forms of reflection are performed most often in isolation. This can be problematic because the writer processes the experience strictly from her own perspective. Although a more experienced reflector will consider multiple perspectives in the analytic process, it is often difficult to question one's own thought processes, recognise one's own assumptions or pose alternative solutions without prompting. It is therefore important to engage in dialogue with each other. Thus, I will

take up the role as a “critical friend”. My role is not to give advice, but rather to pose questions to extend the writer's thought processes, encouraging broader and higher-order critical thinking. By posing questions (using the theories of insight/dialogical inquiry model) I will build on the reflection noted in the journals.

I was wondering how to facilitate this session when Sue, my critical friend, rang and we had a conversation about possibilities.

- Share a surprise moment
- Compare similarities and differences between different stories
- Compare to the insight/dialogue inquiry model – what sort of feedback are you most providing? What are other possibilities?
- Pull out common themes
- Pause, stand back, what assumptions are we making?
- Which lenses are they/myself using? Instructor/student paradigms?
- To what extent does the feedback give a greater insight for both the lecturers and students?

Unfortunately competing time commitments meant it was difficult for us to meet as a group. So I organised two sessions where we met in pairs. The discussions went well. Most of them shared how they gave feedback, describing particular incidents. For example, on an occasion where the student left a station untidy after a wound dressing, the facilitator took the student aside and scolded her. There were a lot of emotional feelings around giving the feedback. There was a lot of informal as well as formal feedback. In matching to the insight/dialogical inquiry model, quite a number were giving feedback in the reflecting, procedural, analysing and applying areas.

In the discussions, we didn't get to explore the different paradigms we might be coming from when giving feedback, for example:

- *Teacher-centred* – teacher perceives the weakness of student
- *Student-centred* – teacher perceives the strengths, movements, challenges and aspirations of the student
- *Subject-centred* – teacher perceives the student as a co-inquirer into better practices, more insightful knowledge and broader perspectives

However, I later saw that most of them were coming from the teacher-centred paradigm of pointing out weaknesses to students. This is something I wanted to encourage the clinical practitioners to question and see if they could explore other ways.

What have I learnt from this:

- Plan and execute project effectively and in a timely manner – don't leave things to the last minute.
- Teamwork with others – this was a good opportunity for me to get to know my new colleagues better, and we learnt more about each other.
- Collegial dialogue – we have very rare opportunities to do this, usually it is very casual. This provides a focus for dialogue and we are developing better skills in dialoguing.
- Sharing session for team members and for me – this helped our learning about effective feedback.
- Broaden my perspectives.
- Improved my facilitation skills, though I still need to extend these skills. I was aware of needing to keep drawing back the discussion to our focus.
- The tool used was an effective guide – it helped us inquire into the type of feedback we were giving. It will be a good basis for future inquiry.
- The seed has been planted for effective feedback, hope it will ripple and spread out to other staff.
- Form another team to work on similar projects in a more organised manner.

Responses:

Anita presented to an audience with each person representing different perspectives. The following captures the dialogue that ensued.

System perspective: It was useful to hear about what you felt you didn't or couldn't do well in the project – being transparent about that. Lack of time is a reality. Getting by on what you could do and still learning and still wanting to proceed is a very good message. We usually hear about the outcomes and results and not about the struggle of the processes. It helps us see the issues in bringing about change and to be more realistic.

Research perspective: I think it doesn't matter what question you start with, whether it is effective feedback or critical thinking. By approaching it through dialogue, the deeper issues and conflicting values will become more transparent. It is worthwhile doing another cycle of action research on this.

Authentic perspective: Nursing is a highly complicated vocation. It is supposed to be a life giving vocation. I was a bit perturbed that the way they learn how to nurse is the opposite of life giving. The very way of delivering a message across, for example, how to take care of hygiene, is important as it can be misconstrued by the student: "You are scolding me, you are finding my weaknesses out."

System – heart perspective: Does teaching enable an embodied understanding for the students? Or is it just technical? How can there be a building in of ethical know-how, not just practical know-how? If the teachers are feeling emotional in giving feedback, how might the students as well as the patients feel? What might it mean to admit these emotions, to have a more holistic approach to learning at all the levels?

Authentic perspective: In the teaching profession we come across students with problems. We find ways to cope. I always used to maintain a distance to protect myself. I carried that throughout my entire working life, an aloofness. I am there to help, but I will distance myself. Now the detachment has come back to haunt me. That is what is stopping me from being who I am.

Anita: Many of the students who do nursing don't want to be there. Nursing is not their first choice but because of the ministry need for nurses, they are put in the course. Our challenge is then how to help them, how to guide them when they don't want to be there.

World – heart perspective: Is this then about passion and lack of passion for one's vocation? Should we be encouraging a world where people can live their passion in their vocation? What is the impact of people being disconnected from the vocation they want to pursue?

The individual perspective: Because the student doesn't have a choice, the scolding doesn't help. It doesn't help the student find a passion for this work.

Anita: It is important for clinical practitioners to understand who their students are. What are the reasons when students can't perform a procedure well? Do they know the subject enough, are they afraid to touch the patient, or do they just not want to be here? The way the nurses behave and guide them puts the students off. The students have a uniform on and are expected to perform, whether they are Year 1, 2, or 3 students. No consideration is given to their level of capability. The project has helped make these issues more transparent for the clinical practitioners.

Team/organisation perspective: From a group of people who hadn't done feedback before, it was canny of you to choose new people, rather than those entrenched in the current system, who may have distanced themselves too much to care or are too

weary to try. The seed has been planted. This is the most powerful thing. You have set up some structure for collegial dialogue. Get these five to pollinate the practice and become the change agents. Then expand into organisational practice.

Industry perspective: What is the purpose of giving feedback to students? If you don't have the passion for the industry, then you are going to be a questionable practitioner. The project built relations between you and the participants. This is a strong beginning. How is this purpose of feedback currently shared with the participants? How does it develop a deeper understanding and a shared passion about the learner in the nursing industry? You have highlighted the purpose of feedback and the way it was given. So how do you lift this into practice? How can you structure time so that more staff can be brought together for dialogue around this?

Anita: Thanks for all the comments. I am not very satisfied with the outcome but want to continue. I think I will need a critical friend to help me with the facilitation processes.

Example: Clinical facilitator gives feedback to a student.

Feedback 1:

Facilitator to nursing student: “You have left your clinical preparation area in a mess. This is not on. Do not do it again.”

Student: “Yes, sir.” Thinks – why are you scolding me? I am feeling so stressed.

Feedback 2:

Facilitator to nursing student: I notice you weren’t able to clean up your work area. Are you aware that it is important to do so? Was there a particular reason?

Student: Yes, I understand that it is necessary for safety reasons, and I was horrified to leave sharps lying out there, but another doctor pulled me away before I could finish, it was all very fast.

Facilitator: Yes, I can understand that happening, I imagine it would be difficult to tell him no.

Student: That’s right. I wasn’t sure whether I could tell him no, I have to finish here.

Facilitator: Well, it would depend on a number of factors, and we can look at how you can develop some criteria to be more discerning about whether to go with a doctor straight away, perhaps understanding the assertive politeness protocol. But I am wondering also, whether you were cleaning as you were going?

Student: Yes, I can see that would be a good option, I wasn’t fast enough, didn’t know where everything was, so I found it difficult to clean as well as be as quick as I needed to be with the patient. I guess I need to better familiarise myself with where everything is kept, and what the different bins are for. But I would like to know what to say to doctors.

Facilitator: I think now that you are alert to these issues, it would be a good idea to notice how experienced nurses manage the cleaning and the doctors. Consider it as collecting data. Meanwhile, you have given me a few things to think about also.

Philip – Exploring peer assessment

July

I am a teacher/manager at the Polytechnic working in the game design area. I take a module on programming which, to be frank, is a very dull course, very technical. Each week the students have a small programme they have to design, building up programming skills to help them work on group game design projects towards the end of their course. I have both adult learners (CET) and students straight from school (PET) in this class. The PET students seem very passive and are often lost, but they don't ask questions. I try to draw them out. I aim to create good visual power points to help them understand the different coding techniques they need. But I am afraid of the silence after I ask a question. I would like to get them to think, to be more self-empowered as learners, to initiate questions when they don't know something.

I have not been trained as a teacher. I have been working in the gaming industry for a number of years. When I came to the Polytechnic, I had a short course to help me understand the module syllabus system, how to break down topics for lessons, how to ensure each lesson covers what is required and that the outcomes are met. Although I have done further professional learning at the Polytechnic, I want to discover other ways. I am open to new ideas and ways of thinking.

August – Tools for Learning Design workshops

The Tools for Learning Design workshops provide me with space to think and explore aspects of teaching and learning that I have not had the luxury to consider before. I have the opportunity to discuss with people coming from diverse experiences and perspectives of the system. There are some very experienced and knowledgeable people here, who are deeply questioning their assumptions about teaching and learning as part of the workshops. I want to understand more about pedagogy and learning. Sometimes I am lost but other times I have clarity. I am having different sorts of conversations here than in my workplace, and it is helping me to see things in new ways. I am being asked to think about what I really value as an educator.

My goals: to be a better educator, think different, leave no students behind, question the fundamentals, encourage innovation.

I am now questioning the notion of academic grading. Can there be more depth to the whole process of grading than simply giving a lifeless alphabetical letter to denote a student's performance?

I remember my own diminishing experiences of being streamed when young into the bottom classes and thinking I was not capable of an academic career. I struggled and struggled to prove this wrong. I realise that I am a certain sort of learner – one

who learns by “doing”, rather than reading theory. If given a chance to *do*, I can learn.

Bill talked about the joy of learning – learning takes place when the learner is excited, interested and willing to learn. Where is the joy of students in learning programming? Where is the joy with the grade that they get? Perhaps I can mitigate any negative effects of the single alphabet grade I give them by providing descriptive comments. But this is an enormous task for a teacher of 40-50 students.

Sue: As I listen to Bill and Philip talk, I realise that we are just opening the door of the issues of assessment. Sometimes we are so focused on the actual measuring we don't question what we are measuring, what we are valuing. We don't consider the role of assessing as one that can be shared by teacher and students to help build up better understanding of what it is that we are doing. I suggest that the notion of peer and self-assessment may give us a new way to look at the issue.

Philip

Yes, what are the values behind the assessment?

What makes a good programmer?

Is there a contradiction between these two statements?

Is the assessment done based on a learning outcome or based on the process of learning?

I am beginning to see that exploring peer assessment may help to empower the students in giving them some control over the process of grading, as well as helping them to see more deeply into the processes of what they are doing.

My research question: What does peer assessment mean for students? What are the responsibilities of a student doing peer assessment?

I aim to trial some peer assessment with the students.

Sue: Philip has asked me to be his critical friend. I realise how much his journey resonates with my own. Like him I came into teaching from industry, without formal qualifications. One of my jobs was computer programming which I found quite boring, and can relate to how his students might feel. As a beginning teacher, I was interested in peer assessment, and each year I trialled more sophisticated nuances.

So my role as Philip's critical friend is partly mentor (someone who has gone through this before) and partly someone who can encourage him to explore issues and what he values through dialogue. However, I can't but help to be enthusiastic. I need to be careful I don't bulldoze him into taking on something just because it is close to my own interests.

As I talk and give examples from my own trials of peer assessment I am reminded how so many teachers are very negative about it. It takes time to build student capacity and comfort with this – they can be initially anxious about others judging their work, and they don't have the skills to make good judgements. It is important to start small, to start encouraging students to think about their thinking and processes and what they are valuing in their own products. This may be helped through asking students what they are thinking in conversation, by adding a reflective question about the processes they used to their assignments, or providing proformas for peer assessment.

Early September – Conversation between Philip and Sue

Philip: “I have been so busy. There is no time to plan and think about this once I am back working in the Polytechnic. There are so many other things to organise. But I want to get peer assessment happening. So each week when students create their programme they give it to another who looks at it and gives feedback. But I need something to help them know what to look for.”

Sue: “It is important to think about the different goals that you want peer assessment to achieve, as this will help you think how you might scaffold it for students.”

Philip: “I want students to

- be exposed to other programmes and approaches to programming
- develop an appreciation for what makes a good programme – make hidden values regarding programming explicit
- develop skills of judgment which they can use in their own programming
- be exposed to different perspectives about their own programming and its value.”

Sue: “So what do you value in a programme? Do you make that explicit for students?”

Philip: “Well, the programme has to work, but it is more than that. I haven't really thought this through before and I probably haven't made this explicit. The programme needs to be understandable and efficient. A really good programme may have some innovative or surprising element that can be used in other programmes.”

Sue: “So based on this, you can create a *proforma* that teases out these different elements and students can then give a rating of one to five. Perhaps a column where they have to write a comment about what they specifically valued and what they think could be improved. Perhaps at the bottom could be a reflection comment where they think about what they have learnt about coding as a result of this peer assessment process. But I think it is important that you start modelling in discussions about what you think makes a good programme.”

Sue: I spent some time with Philip, helping him to tease out the different things he valued in programming. I decided to create a sample proforma as I know, when beginning, it is hard to imagine what one may look like. I was in two minds about this as I think the struggling to create it yourself forces you into thinking it through, and I wanted Philip to have that experience himself. How much was I helping, pushing or filling? This conversation was very pragmatic – aiming to create something to solve a particular problem.

Figure 29. Peer Assessment Proforma

Criteria	Rating	Comments: What do you value? What could be improved?
<p>1. Does the programme work?</p> <p><i>To what extent does the programme do what it is supposed to do?</i></p>	0 1 2 3 4 5	
<p>2. Is the programme coding understandable?</p> <p><i>Is the programme well structured? Does it have line breaks between segments and explanatory comments? Does the code do what the comments say it does? Do you understand this coding enough to work with it?</i></p>	0 1 2 3 4 5	
<p>3. Is the programme efficient?</p> <p><i>Does it use processing power efficiently e.g. parallel processing?</i></p>	0 1 2 3 4 5	
<p>4. Does the programme have the X-factor?</p> <p><i>Does it have innovative or surprising solutions, did it enable discoveries that could be used for other possibilities, did it build on and value-add others' previous solutions in novel ways?</i></p>	0 1 2 3 4 5 "niftiness"	
Overall mark	A B C D	
Reflection: In assessing the programme, what have you learnt about coding? What can you use in the future?		

November – conversation between Philip and Sue

Philip: “As usual, I have been so busy. It is hard to find time to think about this. I realise that to do peer assessment was just too big a leap for me. Part of the reason is that each week, my lessons are planned out – PowerPoints followed by practicals. I barely have time to cover what is needed. To provide time for getting students oriented towards peer assessment has just been impossible. It is too big a learning curve for them and, I think, for me.”

Sue: “Peer assessment is something that you need to invest time in to develop student skills if you want it to be empowering and not stressful for the students. This might mean less content initially and more process. Once the students are used to it, then the whole learning process becomes much faster as they have clear criteria that they are working with. It might mean a redesign of the course next time to give you some space up the front. But I guess the question is, what can you do now? I am interested in understanding what it means to be a good programmer – what that experience is like. Perhaps that can help us to think about this in another way.”

Philip: “While the programming may be dull, there are moments of joy when everything works. Serious concentration can move the coder into the “zone” where you start solving problems and seeing that things are getting there. Not all students get their programmes to work and they often flounder around, never reaching the “zone”. It is more often a struggle. If the problem is too big, it is hard to get a handle on it. Coders work with bits, they use procedural lockstep techniques, they are logical, they problem solve and they need to imagine how this relates to a bigger whole. As a coder, I am used to seeing a whole problem and knowing how to “divide and conquer” – to create the smaller questions or bits. They become doable. This is a typical mindset of the coder. But we also need to know how to piece the bits back into the whole.”

Sue: “Are you, as a teacher, also making the bits for the students? Do they ever practice working out how to cut bigger problems into bits?”

Philip: “You are right. This is exactly how I have been thinking about the course. In giving the students small components they can manage. In doing so, I have actually taken away important problem-solving skills they need. I have been thinking with a very procedural way of knowing – step A, B, C result. Give them specific skills or tools for each step.”

Sue: “What are the dispositions that you think programmers need?”

Philip: “Definitely the ability to problem solve, to persist, to try new things. But there are other skills – how to use online networks to help find answers and to even know how to frame questions to ask such networks.”

Sue: “It sounds like there are several layers of learning needed for your course:

- Coding skills
- Dispositions (persistence)
- Programming processes (networking with others, ways of problem solving, judging against criteria, being able to break down bigger problems)

How might different coding exercises also teach larger lessons about programming processes? How can you leverage off typical misconceptions?”

Philip: “Ah yes, there are definitely elements that I can use here. I begin to see how didactic I have been. Really, I want students to move into self-directed learning, to move beyond their culture as passive learners. I have been bogged down by the mindset of cutting things into bits. It is not so much about me creating course materials, it is about creating questions that enable deep problem solving. It is about encouraging greater interaction with each other which can arouse their imaginations.

In the past, I focussed on “doing” as a way of learning. But I also realise how much I am learning through these conversations. Conversation is a tool for learning. How can I use it with my students?”

Sue: “Perhaps the first step is to try and have a conversation with your students, perhaps one-on-one, about what they are thinking, how they are going about doing their programmes, and what strategies they are using?”

Sue: This conversation helped us to explore new ways of thinking about the problem.

By exploring the barriers to peer assessment, we actually discovered some fundamental assumptions in the design of the course which arose from seeing programming as coding rather than problem solving. If the aim is to develop a good programmer then it is important to really understand what it is that makes a good programmer. All of it.

Looking deeply at assessment helps to break the mindsets we have about how courses need to be. But what can Philip do with this?

December – Philip

Although I have been frantically busy I have tried to squeeze some student reflections in on their programming processes and strategies. First, I tried the approach of just directly asking my students in class. The response I got is not quite unexpected – no response or they are simply too shell-shocked to respond to such open-ended questions.

So what I tried next was to pose some of these questions in an assignment report I asked them to write about so I could get an idea of what's in their heads as they attempt to do their assignments:

- What were your learning strategies when tackling with learning how to code with SDL_Net?
- Do you find SDL_Net easier or more difficult than using raw socket programming?
- What are some of the problems you encountered in this assignment?

I think some of the feedback I got from this is quite interesting. I realised a few alarming things like, for example, a lot of them are missing some critical tools knowledge which they should have already known at least a year ago! I also find interesting the difference between a student who “gets” programming versus another who’s still not quite there yet. The student who’s not quite there yet will usually find the raw socket programming technique simpler and easier to work with than the more complex SDL_Net compared to a student who is more advanced in understanding. I think this has been a very useful peek into their brains to help me better understand how they learn, and thus craft a better approach in my delivery in future teaching.

Sue:

Philip sent me six responses of varying lengths and reflectivity to his reflection questions from his class. Despite not being able to answer Philip’s questions in class, all students actually made a good effort at unpacking their processes, showing a clear ability to do this. So this may be a very useful first step for others who are facing the brick wall of silence in their classes. I noticed that some of the more capable students are more self-directed: using networks to ask for help, doing on-line tutorials and being able to synthesise solutions from various sources. The less capable ones seemed to ask a single person for help and have them explain exactly how to do it.

I now wonder whether these students would be more capable and confident of discussions on their processes in class since doing this assignment. Could the more self-directed students be good mentors and models for the less self-directed ones? I wonder how Philip might share some of the strategies people use to solve their programming problems to build up deep problem-solving processes. Initially, such conversations seem very strange, but the more capable reflectors can actually help pull the less reflective people along.

February – Philip

I have been continuing to build in conversations and reflections about learning strategies and thinking, and students are now more aware. The students are at the stage of giving presentations to each other on their projects, and will be giving feedback to each other that goes towards the assessment. It has proven to be very

useful for student learning. It helps them to see things together, to be able to see other points of view and to start realising their own mistakes.

While I would like to bring this across to other courses that I teach, the difficulty is that I am not the main course manager for other courses. Although I would like to have a team in our section to continue this across a broader range of our courses, it is very difficult to discuss this with colleagues. Time is a big issue for me, but others coming from traditional approaches to teaching also pose a problem. It would involve a considerable change in mindsets about programming and about learning.

Michelle's story – The being and becoming of a teacher

The centre must hold

The stage: concentric circles. Inner circle starts with self, moving to team, organisation, system, nation, world, cosmos.

A Play in two acts

Act 1: A monologue by Michelle, the protagonist.

Act 2: A dialogue by the audience sitting on the stage, in the various circles.

Figure 30. Activity for Tension and Dilemma for Ecology Room Workshop



Act 1: Michelle

I am going to take you on my journey. It moves through these different levels.

After the TLD workshops in August, we were supposed to come up with a research question. Mine was “How does the learner become the trainer through the Advanced Certificate in Training and Assessment (ACTA) programme in Singapore?”

I am standing here between system and nation because that is where that question came from. I was very much in my Training Manager hat where I manage the development, delivery and review of the ACTA and Diploma of Adult and Continuing Education (DACE) training in Singapore. *How far can teachers or trainers be trained? Can the craft of teaching be learnt or is there something already there in the person, natural traits or attitudes that make the learning stick? To what extent can a*

professional identity be assumed through training? Is the IAL training process the right road to take? My questions were very specific to my job of reviewing the impact of the training programmes, even though I wanted to feel this bigger picture of how teachers and trainers become teachers and trainers – the being and becoming of a teacher – the making of the teacher in me, the intertwining of the “teacher self” with the whole self. At what point do you declare, yourself “Yes, I am a teacher,” or “Yes, I am a trainer”.

I left the workshop and I knew I had a lot to do, but of course a lot stepped in to overwhelm me. So I am now standing in the organisation, because the organisation stepped in to disrupt anything I could possibly do. On top of my training manager position at IAL, I took on an entire new division. At one stage, when my director was on a business trip for three weeks, I was literally running two divisions so you can imagine the type of workload. So when you are in that mode trying to learn what needs to be done in a new division, trying to align team expectations, team fears and dealing with a team, that is some kind of transition mode. It was very difficult. So this part took up a lot of time and kind of got in the way of thinking about this project. I couldn't think of adult educators – teachers, trainers – beyond this ACTA and beyond my function as a training manager.

Then, of course, I had my critical friends, Helen and Sue. Helen dropped by with some books, Sue recommended readings and sent articles. So I actually got started on building up something else, thinking more about what I really wanted to uncover. Was it really for ACTA? Or was it really for something else.

And so you know, when in doubt, you go back to yourself. And here I am standing in the self. I did a reflective journal on how I had started my own journey to where I am now. I started as a teacher and became an adult educator. And it was an up and down journey. There were various impulses and situations that led me to this point. So I was expressing that to Helen and to Sue, and I think Sue caught onto the fact that there was more to it than the ACTA part of things. I was really questioning how many other people have journeys similar to mine?

And so I started talking to people, getting them to tell little stories. But I didn't have the technique at that time. I didn't know how to ask the questions that I needed to ask. So it was just actually conversations, some of them deeper than others. I realised that all the journeys come from all over the place. And so I thought, okay, this has to progress. There is something about teaching from the self-perspective, even from a “**WE**-cultural” perspective. Teaching is not just a job. Being an educator is not just a job. There is a part in your personality that doesn't stop. All these artefacts we have created here indicate that. There is a merging between life and teaching. As Bill said, he needed to protect himself from teaching, he had to be aloof to survive. What does that mean, that your personality is so enmeshed in your function? So teaching is a lot more than a job.

I wanted to find out if everyone feels the same or feels something else or has different constructions of what it means to *be* this teacher and *become* a teacher. Becoming first and then being. Sue understood it and was able to supply words to help me along the journey. Words included essence, existential, identity, transformation. And so I started reading more in that area because I needed the theoretical clarity to some extent. And for myself, team, organisation, system, nation, all together, I also started on my PhD studies. I went to Bristol University for the first time, and the first module was “Understanding Educational Research”. It was a very boring title for a really great module. This module helped me (I am now standing in myself) sort out different philosophical stances. Before this, it had been unclear. Plus, it gave me a break from this “empire”. I went on my own, but I am familiar with UK because I lived there for a year. So it gave me time and space to think through a lot of things. Sue hasn’t said very much about it, but I think after I came back, I actually had more to give to the project. It was not only clarity of stance or clarity of theoretical knowledge but also clarity of what I really want to find out and why.

And so Sue had a really great idea and she helped me. She proposed setting up an “ecology room” where I could get the team members here to come in and use the room. I could then effectively get my data, even though it would not be the empirical type, in terms of numbers and figures. So we had a really fun time planning the ecology room with many different activities to help people express the different issues with and aspirations of being a teacher. It was just done last Thursday with 12 people doing the activities – trainers, administrators, managers, quality assurance. One of my colleagues, Anne, came into the ecology room and did this collage. I had a chance to get her to explain her journey.

This is her 30, 40 years ago when she started, when she was a teacher. She was very reluctant to be a teacher. She didn’t think it was her. But she comes from a very old-fashioned Chinese family who would not send her to school any more after a certain level and so she had to go out and work. At that time, there were not many choices, you either ended up as a teacher or a secretary. So she took a position as a teacher, and she said her idea of a teacher was old, sage-like, the knower of it all.

Figure 31. Participant's Assumption(s) of a Teacher's Role



But now all these thoughts have had to give way to this new idea of being a teacher. There is a nice picture of a girl who is doing at least six different things. She is balancing on a tightrope, moving this hoop and balancing something on her head. Now there are so many roles we need to juggle all at once as a teacher and, in fact, you become the Indian Chief to your learners. Something has to give way. She says teaching looks like a nicely manicured lawn, as in this golf course, but you know there are holes in there, sand traps. You don't quite know where you are heading. She said, previously, she had an idea that learners were like cows in that you could say "do it that way" or train them to do it that way. But now, she says, learners are so diverse and here she even gets to meet CEOs of companies who are learners.

So she has come a long way on her journey. But I also know she refuses to step into a trainer role although she is a trained teacher. She says "no way" because she doesn't want to go back into that teaching role. It is intriguing that she has found a niche in administration supporting counsellors, but she still identifies with teaching; thinking of the impact on learners, but is not in front of learners.

It is stories like this that I need to get and then deconstruct. And it is here in part of the ecology room that we drew our journeys. All of us drew our personal journeys of coming into the profession. The journeys were really quite amazing because we had people who had come in by chance, people who had come in by force, people who said they started off with such passion and then they dropped out for a while. They needed that recovery time before they could come back in. Some were not convinced that they were on the right path, “I don’t have a road map, I am unconvinced about being a teacher”. And you think to yourself, this must be one big job. So much angst about it, but at the same time, you feel the joy. It is a very redeeming thing.

I haven’t had time to analyse the data but there is a huge lot. We did a lot and I discovered very many facets of my colleagues who attended that particular session. There was a little construction, an altar made out of boxes. That was one of the activities that we had where they were supposed to build a representation of what the system meant to them, and Greg came in. Greg is one task-oriented person – he sends you emails with massive spread sheets with timelines to the n^{th} degree. He was the first one who got down to it on the floor, removed his shoes voluntarily, and started building. We were all surprised. I thought I knew these people. I have now glimpsed outside of being transactional work colleagues.

Figure 32. Workshop Activity



At the end of it, we asked certain questions:

- At any point of your career, did you feel like a rookie, did you feel like a learner?
- At what point did that stop and when did you realise you were a teacher?
- What moments surpassed your expectations of teaching?
- Was there some point where you wanted to throw in the towel?

They were tough questions, but people got down to them. We traded battle scars. These were the moments that defined us, shaped us as a person, made or broke us. So there were a lot of emotions and I found out a lot where world, nation, system, organisation and team are concerned. And then along the way, as I stepped back into the self, I was confronted with what I should do with all this information and all these stories that are too valuable to let go? These would give us, this entire line (self, team, organisation, system, nation, world), a much better picture of what has happened here. I am poised to be that person because I have been to every part.

I started this, thinking I would do a little experiment, a little bit, just to see whether it would work out with my PhD, but it has become a lot bigger, it is speaking to me, Sue is speaking to me, and I think the stories are speaking to me now that I have a little more of an inkling, a greater grounding of how to get those questions. And when I go back to Bristol for Module 2 which is narrative inquiry, and March when I go back for Module 3 which is auto-ethnography, I will have even more tools to get these stories out. What do I do with them in the end? I think there is a whole lot of potential which could affect this whole line down the way. The thesis will get written. Beyond that, there could be a lot there.

Act 2: The audience speaks from the stage

Sue (individual level): It is big, it is a life's work.

Michelle: It is huge, but it will get done. I handed my training manager role over properly to Jimmy this morning. I had been preparing him for the role for months – a slow give-over. I think I was meant to be in this new role, taking over professional development services. Part of the being and becoming, the emotional self, has to be supported as well beyond the ACTA modules and the DACE course which we have done, but in other ways as well, as a proper support network in the form of not just professional development services but something bigger. I think I am meant to be there.

Bill (world/cosmos level): You are knee deep in the system now. (Michelle is literally kneeling in the system next to her journal and folder. She looks down and recognises it and laughs.)

Sue (individual/facilitator): Michelle, stand back into the "self". I am going to get you to declare this self that is birthing in you. I feel like a mid-wife. What are the words

that describe this self that you want to take forward when you walk through all these layers (team, organisation, system, nation)?

Michelle: Firstly, some descriptive words, "*poised on the brink*". I think I am a kind of catalyst, a kind of connector, a bit of a mover and a shaker. While I can understand the being and becoming of this very special group, I also have the means to propel it in a particular direction if that speaks to me. I guess I am also kind of a guide. Maybe later when I have all of the stories, I could possibly do something to help people find their way along this pathway. It is what started this journey as well because people come up to me and say I have a heart, a passion for training. I want to see what makes this passion and if it is in them, and how that can equip equally with everything, to help them become this teacher, this trainer.

Sue (facilitator): Come forward one step into the "team" for the next question I am going to ask you. In the ecology room, you opened the box for quite a few people there. That was emotional. Who is going to take responsibility for them now, minding their growth?

Michelle: I can start. Half that room was Professional Development Services, so I can start. But from a team, organisation, systemic, nation level, the Learning Development Services – Jimmy's division – has a role. There are many streams to take care of this.

Sue (facilitator): Come forward into the "system". As the system now, what is your responsibility to all these other people here in the room, representing so many aspects of the system?

Michelle: The stories must speak to these people and from them. Not just writing them out, but re and inscribing. The stories must show them a way. These people and these stories represent who we are working the system for.

Sue: (facilitator, turns to the others in the room). Is this enough? What would you want Michelle to do, with one foot in the system and another in the nation?

Fettia (nation/world level): You can help to inject humanism, to improve the whole process. How can people like Jenny do what they like doing, and really contribute to the nation?

Michelle: A key thing is now it is no longer faceless. Now I have lots of stories and faces to them.

Marie (system/ nation level): Your system seems quite flexible. You are able to move through all these levels and take yourself with you. If you have support from your organisation and can work even harder with the system, you can get what you want.

Jimmy (organisation/system/nation): What would be nice is to uplift the status of trainers in Singapore. Champion teachers? We are almost left to fend for ourselves.

There is a very disparate group of people. It would be nice to put names to faces, to what this group represents.

Fettia (nation/system): It is important to influence organisations in industry, to bring the system to the next level. We also need to improve the way trainers teach students – the ACTA modules.

Michelle: Handing over to Jimmy (the new training manager) on this one.

Anita: (team): You want to see passion and dedicated teachers. What is required to help teachers do this?

Bill: (nation/world) – I think you are in a position of great leverage and power. I can see where you are coming from, your intent is very solid, and I am warmed by that. I will share this little story. Last week, I taught this ACTA training module and talked about curriculum developers, and one of the learners shared. He was asked to develop a courseware for an Approved Training Organisation (ATO). As courseware developers, everything has to be clear – the philosophy and intent, a lot of work has to go in, a lot of heart and thinking. He says, “If the ATO is only going to pay me \$1,000, I am only going to do \$1,000 work.” So these are the very real limitations of the system from the industry that are coming from the ground up.

(Michelle begins to creep back to the organisation and team levels.)

Sue (facilitator): Can Michelle do this, is it too big? Does Michelle need to come back into a smaller level? Michelle, why are you creeping into the organisation and team level?

Michelle: I think I can do this. I think the role I have in the organisation, the teams I am part of, I think I can begin to address the larger stories which I already know, I can address these other issues which I already know and which are real. In this new role, I meet the industry validation group for the whole ATO framework – I get to talk to government, union, employers. I actually have this whole line – self, team, organisation, system, nation. (*She walks along it.*) The growth in this course was here, in the self. The universe, the cosmos had moved things so I was able to get a bigger picture. So previously, I was the training manager in the organisation, just one part. Now I am poised to do other parts that can actually help the bigger picture. (*She walks out to the nation level.*) We are talking two, three, four or five years. But I think if the intent works out clear, the research, the theoretical aspect, it will come into the academic arena. If the intent is clear, it could be years, but I will get there.

Bill (cosmos level): So turning around what you said before this session – “Can the centre hold?” – *your own centre must hold.*

Michelle: Yes, it is definitely more that *my own centre must hold.* Bristol helped. Before that, I was very conflicted about taking the scholarship because it would tie me to this organisation for a long time but I had to complete it. When I was in Bristol,

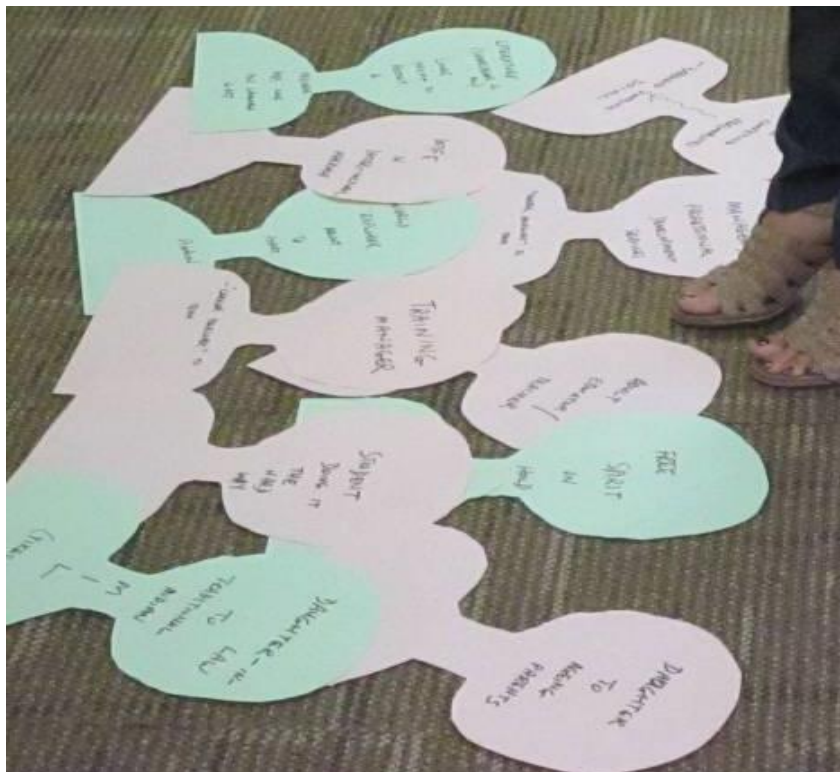
I realised why I had to complete it. *That is what I am there for. That is why I need a long time to do what I need.*

Helen (organisation): And all this sustains the self. Can you align the aspirations of yourself, your different roles with your work and your intent? That is where this next step out from the self becomes important, who are these multiple teams that can support you?

My roles:

- Training Manager – now discarded
- Manager of Professional Development Services
- Mentor/coach
- Adult educator/teacher
- Mother to competing personalities – a weekend do-all
- Daughter to aging parents
- Wife in inter-racial marriage
- Daughter-in-law to traditional Indian mother-in-law
- Student doing it the hard way
- World explorer – about to start again
- Literature lover – trying to protect my love for art
- Free spirit on hold

Figure 33. Workshop activity



I Am

I am unfettered, yet bound
I wonder how this could be
I hear words of encouragement
I see walls closing in
I want to run, but stay
I am unfettered, yet bound

I pretend everything is perfect
I feel pulled apart
I touch resistance
I worry I can't fight it
I cry out against the tension
I am unfettered, yet bound

I understand the antithesis
I say both directions need not oppose
I dream I'll find equilibrium
I try not to fight it
I hope I master the contradiction
I am unfettered, yet bound

Chapter 6 – Themes

Theme 1 – Deepening pedagogical understanding through “meta” processes

Our key research question was to investigate how ‘meta’ processes might deepen pedagogical understanding. We found that meta-thinking was intertwined with related processes of inquiry, dialogue and reflection. It was mediated through various tools, personal motivation and opportunities for praxis and feedback within participants’ own contexts over time. It was fostered within a learning environment where dialogue was intrinsic to participation, enabling the development of a vulnerable community of care. This enabled a level of reflection beyond the technical reflection that teachers might normally engage in on a daily basis to improve their teaching.

“Meta” processes included:

Applying a “meta” lens to Shulman’s (1987) pedagogical teacher knowledges	<ul style="list-style-type: none">• exposure of assumptions and values,• recognition and naming of tensions,• developing a shared pedagogical and meta-language,• making different paradigms, frames or identities visible
Agile, iterative and dialogical processes	<ul style="list-style-type: none">• iterative movement between problem, research questions, methodology and methods;• bringing layered thinking;• entering into and consciously exploring different identities, perspectives or frames;• creating a dialogical space for exploration (keeping complexity and difference alive).
Conscious inquiry into one’s own thinking and processes.	

Particular tools were important in mediating this, for example, the ecology room, being in multiple roles, modelling of new possibilities, experiencing difference, self and peers, dialogical inquiry model, integral model, metaphors of teaching and curriculum, questioning.

In this section, we tease out some of the qualities of meta-thinking which, in some cases, help us to ask deeper questions about how we think and design curriculum.

The role of tools to help us reflect and to see larger frames

The following quotes are taken from the participants reflecting on the activities they had just done in the ecology room (Day 1, Workshop 1) that encourage thinking about the teaching paradigms they are in, what they value in student-teacher relationships and what is effective learning versus learning.

I was just thinking of the different layers. I was just thinking about WSQ level. Obviously, the competency-based approach requires the achievement of the learning outcomes, which means that it's kind of very structured. So to take on a more, let's say, enculturation kind of approach, if you talk about those eight teaching metaphors and you talk about those empowering the learner, talking about how you change the social and almost an emancipation approach, then that's kind of not competency-based.

Here we can see this participant identifying layers: teaching metaphors, WSQ system, learning outcomes and implications, then the learner, different approaches and the implications. The teaching metaphors framework enabled not only a comparison with other approaches, but took the participants out of the everyday competency-based approach in which they are often embedded. The tool of the teaching metaphors, and no doubt also the experience of the ecology room and a different kind of facilitation, enabled reflection and a naming of layers, indicating the iterative movement between environment and expectations, tools, reflection and meta-thinking.

As I go along, then I realised that when it comes to this, that is where the relationship between you and students is important. The take away from it is the relations because whether you are facilitating or you are designing it, you must always take into consideration between the trainer and the students – how are they going to interact and so on like for assessment as well. Then it comes to what effective learning and learning look like. I was trying to figure out what is the difference between the two. But again it does start to get me to thinking deeper, have I really looked at it in the deeper perspective?

We can see in these two quotes that both internal dialogue with self and external dialogue with others is intrinsic to the use of and exposure to different tools and prompts for reflection. The quotes are tentative, explorative and vulnerable, thinking aloud, trembling on the edge of understanding.

Another participant comments on not only the ecology room itself, but the multiple tools within it such as the different roles participants were asked to undertake, including responding to the work of others. In addition, there was a realisation that content can be learnt in this way, placing trust in the learner's ability to learn, handing

the responsibility for their learning to them and engaging them in activities by inviting them to make meaning.

I thought it took real courage to have so many things working at the same time. I mean, there were so many levels for you here and everywhere. There was a huge lot of content. There were a huge number of different activity types to grapple with. There were different roles to get yourself into – working roles, doing roles, and then responding roles, and then responder of responder roles, and then there was the pedagogical deconstruction level.

This comment is also an example not only of reflection, but of meta-thinking, as the participant has stood outside of the experience and examined and named it. Similarly, the following two participants appear to have uncovered an assumption about learners and learning; it is not necessary to hold the learner's hand.

Here we are, we see ourselves as nurturers, carers, developers of people, and therefore we want to hold the hand but also we want to see them grow and develop, absolute contradiction in terms of what we are aiming for and what we are doing. Well, for me it is anyway.

It was just so much. There was just so much going on and, of course, those are always against frequently accepted assumption or frequently accepted notion that try to focus, and you try not to complicate things too much because it might, the risk is that the learner ...

The experience of being a learner who is trusted, indeed expected to make meaning, to negotiate her way through a process or series of processes and activities that involve more than cognition, that are holistic mind/body experiences, became an object made visible for our participants. These objects in themselves then became a focus for dialogue.

A key feature of the first workshop was modelling of the meta-thinking processes – the facilitator naming and unpacking what was going on – and encouraging others to do so. An example was Sue's intervention in a brainstorming activity "What are tools for learning?" by first asking participants to pause and think about their assumptions, then to have another go. When she saw their faces (some screwed-up, some hard thinking), she asked them to capture their "thinking" on cut-out clouds and share with each other. The process was emergent, rather than pre-planned, and participants were interested in why she did it or knew how to do it. Sue named what had happened in terms of one of the teaching metaphors – *teaching as conversing* (see side-box on next page.)

This enabled a frame or paradigm to become visible, now an object for meaning-making, reflection, discussion and inquiry. Rather than just an abstract concept, it was also something that people had experienced. Being a shared experience, it was something that could be further unpacked in later sessions to pull out other nuances, such as enculturated responses to teachers stopping activities because learners are doing things wrong. Further, this particular paradigm of teaching could now be used in other situations to point to what may or could be happening.

This conversation shows that participants realise a need to move into different paradigms. While participants found this difficult initially, by the final workshop, they were moving in and through the different paradigms provided by the integral map and the holons with ease, just as they were using the language newly gained from the teaching and curriculum metaphors. For example, the comment on using the dialogue map to construct responses from different approaches on the first day was, "Quite difficult because your natural instinct, your spontaneous comments, come first so it is very difficult." Yet Anita, for example, used this tool as the basis for her action

Response to being asked to write speech balloons and then discussion – what happened there?

Person 6: I think this is really interesting in terms of what goes on. We had expectations as teachers about what we want. So you're labelling this stuff as reading this group and opening. You've labelled this as knowing there's capacity to go deeper and that's what you read. You say that's different from having expectations.

Sue: Yes.

Person 6: And that's what allows you to use the *teaching as conversing* framework. You've moved into this framework this morning.

Sue: Yes. And this framework says teaching is being mindful and being conscious of the emergent collective. So you're aware of the group. And so where we were talking about assumptions, that we've got to meet individual learner needs. This actual paradigm is actually saying, hang on, there's a collective and there is the benefit of the collective. And you guys just showed that.

There were beautiful moments. And I loved it when Marie went up to somebody, and just said "I want to know, I want to know what is there on your cloud." That kind of interest and passion and depth, vulnerability, revealing the confusion, revealing the underlying thoughts was a really special moment. Yes. That collective, if we tune in to the collective, we can see that the collective together has got the capacity that is more than the individual. So that's what that paradigm is about, teaching as conversing. You might think you're caring, that's one of the words, or conversing. But if you're fully into the paradigm, you're caring from attunement to the whole. And so we care for the whole.

inquiry in developing her clinical practitioners' art of feedback.

Meta-thinking as inquiry into self and practice

Meta-thinking for some began on the first day, with the following participant asking himself a range of questions about possibilities:

The most important thing I learned for myself was that there was actually just so much more that I could take on because I am not a natural theorist, but I do know there are theories that exist and I can see my practice falling into certain theory types. But there is a whole big wide world out there, and it was just, that was the biggest thing for me. And then, there was a whole host of questions, the questions cascade came out from myself. What do I do now that I know so much more to know? What can I do to take this on? How much do I want to take this on? How much am I up for? That is quite interesting.

There is an implicit relationship between dialogue, reflection and meta-thinking. The above participant was given an opportunity to realise for himself what more was possible and the power of knowing more. Then to realise that he was even asking these questions was perhaps something of a surprise – “that is quite interesting”. So there are layers of thinking here. This learning about self was particularly powerful in the case of Bill, who in the discussion following the ecology room on Day 1, voiced his thoughts.

I want the learners to try on their own, give it a go, don't be afraid, there are minimal risks anyway. but I also now begin to question myself whether that position should be static or whether it should be a dynamic position almost like, do I really need to see myself as a facilitator all the time or can I now then say, be a bit more relaxed, and let myself move around when dealing with the different people? So that I am not kind of stuck in “facilitator” all the time. I don't know, I have to think about it.

These early beginnings of Bill's story illustrate the obvious, that we do not change our practices overnight, that we need time, purpose, ways of thinking about our practices and future possibilities, and the support to do all this.

A reflection (Workshop 1, Day 2)

“The other thing also we came to know is that once you become teacher long term, you become quite complacent and you're very comfortable with your pattern of teaching. So sometimes have to take the challenge to rock the boat and not enough venture. And see what other new challenges you can do to make your teaching more innovative and interesting.”

TLD participant

Some of the opening up of possibilities, possible alternative ways of thinking about teaching and learning was expressed on the second day of the first workshop in a discussion about assumptions. Marie reflected:

My assumption was effective teaching and learning is constrained by the system. But after the discussion, probably, I understood that with much planning and putting in a lot of thought, you can really bring in quite a number of elements and conduct the lesson more effectively.

Bill also commented:

I actually had two assumptions. The first one was that I now realise, or better realise, that learners can be empowered and liberated, even within a confining system. And my second assumption was that – it [was] a personal one – [was] that reflection will continue to be a powerful tool in my practice. I think in the conversation and in answering the first set of reflective questions, I answer set two, which is the curriculum as currere. I was actually saying that the contrast, the dilemmas, in my situation was very evident to me. There's my personality, my teaching personality versus the system. There [are] goals, set goals, versus change, liberation, empowerment. There's control versus loss of it. There's variety versus focus. There are just so many schisms in the whole construct. Lots of schism. So we were kind of discussing what our dilemmas were. And the conclusion made was that, yes, Philip was expressing how it was difficult to rock the boat of an entrenched system. My conclusion was that yes, I'm not going to set up to rock the boat of systems; I'm going to set up to rock the boat of myself, that's what I can do. I was explaining that that was my purpose coming in to this workshop as well, to explore what other paradigms there are.

For Bill, there is an emerging clarity and exploration of possibilities for different kinds of practice within a system that privileges *curriculum as content* and *teaching as training, instructing* and *drawing in* (Chapter 5).

As the projects advanced, participants continued to engage in meta-thinking, reflection and critical thinking about their practice, their selves and their epistemologies.

Anita commented that when her clinical practitioners matched the feedback they were giving their nursing students in the ward to the aspects of the dialogical inquiry model, many gave feedback “in the reflecting, procedural, analysing and applying areas”. And although they did not have time to discuss the different paradigms they might be coming from when giving feedback, she later noted that most were coming from the teacher-centred paradigm of pointing out weaknesses to their students. “This is something I wanted to encourage the clinical practitioners to question and to see if they could explore other ways.”

We see in this observation of Anita's a thinking about the paradigms, the assumptions on which teaching practices are based, and thus the use of critical thinking in working towards naming epistemological ways of knowing.

Bill began to "notice how every person I come across comes with motivations, fears, preferences, that are very deep seated and which I would never be able to uncover very quickly. As a result I need to find out, I need to give it some time... I don't rush into things... When I am working with groups, I am watching the process, watching my own opinions..." Bill is watching himself, being aware not just of his thought processes, but also his responses as they relate to his whole being. "I don't need to be the god, I don't need to hold your hand all the time." This realisation was helped by finding and digesting an article discussing the Confucian ethic in Asian education, and realising that he did not have to accept being placed on a pedestal; rather, he could be himself. In meta-cognitive terms, Bill is self-regulating his cognitive processes. He grew in his confidence (Schraw, Crippen & Hartley, 2006) to move from a cultural idea of what a teacher is to being himself in his teacher role. As Paris and Winograd (1990) note, this process means you become aware of strengths and weaknesses, thus there is an impact on the affective domain. Bill spoke about feeling calmer, more together.

Bill, Anita, Philip, and Michelle all made judgments and explored alternatives to using evidence to develop an argument for change. Certainly, it is true that Anita, for example, could have probed deeper in identifying the procedural nature of the advice for clinical practitioners on giving feedback to students and her desired intent. However, Anita, like Bill and Marie, was at the beginning of a journey. Despite this, they were evaluating and developing their epistemological understanding using judgment, evidence and argument (Kuhn & Dean, 2004, p.271). In Michelle's poem "I am", the opening line "I am unfettered, yet bound" is indicative of the holistic nature of meta-thinking; thinking necessarily involves feeling.

Lai (2011) states that the extent to which we become aware of our own behaviour, the awareness and management we have of our own thinking, is important in developing meta-level control and the ability to use these skills in other settings. The requirement in our three-month programme for participants presenting their projects involved recall, and the implicit challenge to make sense of the undertaking and findings of the inquiry project required participants to think about their thinking. What changed for them as a result of participating in the workshops and undertaking their projects? To address this question, participants were required to make judgments as they made sense of their experience. Van Zile-Tamsen (1996) notes that simply providing knowledge without experience or vice versa is not sufficient for the development of meta-cognitive control. He also notes that possessing knowledge about one's cognitive strengths or weaknesses and the nature of the task, without actively utilising this information to oversee learning, is not meta-cognitive.

Our findings find support in the literature but also emphasise the holistic nature of thinking about thinking. It is not just a cognitive experience. Rather, thinking about thinking is necessary to develop meta-level awareness and skill that contribute to moving successfully between settings.

From content to intent to pedagogical knowledge

I have been bogged down by the mindset of cutting things into bits. It is not so much about me creating course materials; it is about creating questions that enable deep problem solving. It is about encouraging greater interaction with each other, which will arouse their imaginations (Philip).

Philip's comment is telling; from carving out time to try something different and then reflecting on the feedback from his students, he has moved from seeing the minutiae to the bigger picture. As a result of thinking about the essence of a programmer, about the process, thinking about the match between this and what students currently do, the dispositions programmers need, the big picture of the type of skills, that is, seeing programming as problem solving as opposed to coding, Philip realised the limitations of creating course materials that led students to complete small bits rather than larger wholes. The larger wholes are more likely to reflect the reality of being a programmer, of thinking like a programmer as opposed to just doing programming. Being a programmer requires problem solving, networking, imagination and being a self-directed learner rather than a passive learner.

But Philip's insights did not stop there, he also commented that,

In the past I focused on doing as a way of learning. But I also realise how much I am learning through these conversations. Conversation is a tool for learning. How can I use it with my students?

By seeing programming as coding, the course design correspondingly focuses on students doing coding. The shift from seeing the task to seeing the development of a professional – a programmer – opened up possibilities that are much more exciting for both the teacher and the students. Shifting from students doing a task to creating time, space and valuing dialogue not only created possibilities for richer learning but for Philip to gain insights into his students' thinking.

I realised a few alarming things like, for example, a lot of them are missing some critical tools knowledge which they should have already known at least a year ago! I also find interesting the difference between a student who "gets" programming versus another who's still not quite there yet. The student who's not quite there yet will usually find the raw socket programming technique simpler and easier to work with than the more complex SDL_Net compared to a student who is more advanced in understanding. I think this has been a very useful peek into their brains to help me better understand how they learn and thus craft a better approach in my delivery in future teaching.

Creating processes for a “peek into [students’] brains” creates possibilities not only for understanding them and their learning, and thus better teaching, but also helps us as teachers to find ways of further developing meta-cognition, learning to think in this case like a programmer (as opposed to a coder).

Philip’s insights identify issues about how we think about curriculum. Often it is not actually curriculum, but the creation of course materials that meet highly specific tasks that are being developed and delivered, as opposed to what is actually curriculum. Curriculum is the bigger picture, the intent across a whole course. If those who develop course materials are not part of conversations about the development of curriculum, its purpose, intent, values, where a particular unit sits in relation to the development of learners, and in relation to other units, then all they are left with are specific standards or outcomes that stand alone (Bound, Rushbrook & Sivalingam, forthcoming). There is no link to what has gone before or what is currently being studied or what is yet to come. There is no appreciation of the overall intent of what, for example, a programmer *is*, or what an adult educator *is*. This results in considerable missed opportunities.

Starting with content and remaining with content (e.g. coding) limits learning, thus also limiting the development of professionals and those learning a vocation. Broadening out and asking key questions about the intent of a course, of the type of work being done and what is valued by experienced practitioners bring a change in focus and with it, potential change in pedagogy. Changing the assessment in a simple way addressed a number of bigger picture requirements to be met. These include getting students to think about their own learning, laying the groundwork for establishing a culture of dialogue, sharing and therefore networking, thinking about ways of problem solving and, of course for Philip, learning how students think. This last, being able to address gaps, will help further develop those who “have got it” and potentially identify some students as mentors. The pedagogical shift is significant, from small bits in a belief that students need to be spoon fed to a belief that students can take responsibility for their learning. Dialogue becomes important and we need to create a culture, and thus time and space, for genuine dialogue. This reflects a shift in Philip’s pedagogical knowledge of his learners and pedagogical content knowledge (Schulman, 1987).

Tensions in our language

Change is not a smooth, even linear process. Anita’s story illustrates this through her use of language.

Our intent is to help develop an independent learning environment, to groom thinking nurses, especially critical thinking nurses. (Anita)

There is a tension between the intent to develop critically thinking nurses and grooming them. Grooming brings forth images of grooming horses, cleaning, tidying up and preparing the image. This is a very different intent from developing an

independent learning environment that encourages the development of critical thinking.

Critical thinking is the intellectually disciplined process of actively and skilfully conceptualising, applying, analysing, synthesising, and/or evaluating information gathered from or generated by observation, experience, reflection, reasoning or communication, as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness. It entails the examination of those structures or elements of thought implicit in all reasoning: purpose, problem or question-at-issue, assumptions, concepts, empirical grounding, reasoning leading to conclusions, implications and consequences, objections from alternative viewpoints and frame of reference (Scriven & Paul, 1987²).

Scriven and Paul's definition of critical thinking suggests learning to think critically as a complex process. To learn how to think critically, we need to engage in the processes of critical thinking. As Anita tells us, critical thinking needs to be developed, and it requires that teachers think critically. Although Anita changed her focus because of timing issues from critical thinking to feedback, her focus on feedback in the practicum setting relates nicely to developing critical thinking. Interestingly, if we use the Map of dialogical inquiry (Stack, 2007; Bound, 2010) as an analytical tool, the official advice given by Anita's institution to teachers on feedback can be categorised as procedural (e.g. referring to timing, being objective, processes) and relational (e.g. giving full attention). This advice is consistent with the idea of 'grooming'. However, if we have the intent to develop critical thinkers, then we can again use the map of dialogical inquiry (see Chapter 4) and Scriven and Paul's (1987) definition to identify the need to encourage analysing, theorising, imagining and reflecting.

However, by undertaking her small project with a small team of new teachers using the Map of dialogical inquiry, Anita herself engaged in critical thinking, drawing on different teaching paradigms to identify that most of her team were "coming from the teacher-centred paradigm".

Our use of language is complex. When Anita uses the term "grooming", it is indicative of official ways of thinking, just as the term "imparting knowledge" is expressive of an official (but not written) ideology about learning. Volosinov (1987, p.89) suggests that "the wider and deeper the breach between the official and the unofficial consciousness, the more difficult it becomes for motives of inner speech to turn into outward speech (oral or written or printed, in a circumscribed or broad social milieu) wherein they might acquire formulation, clarity and rigor". Within an utterance

² <http://www.criticalthinking.org/pages/defining-critical-thinking/766>

are the thoughts of those with whom we may disagree (Shotter & Billig, 1998) so that each utterance contains both a push towards unity and a push towards heteroglossia (Bakhtin & Holquist, 1981) – a diversity of voices and points of view. This is clearly evident in Anita’s utterances, in Philip’s desire to assess his learners in a holistic, meaningful way, yet teaching the specific tasks of coding. Bill felt this tension teaching in a WSQ environment but asked how learning can be “life-giving and joyous?”. Michelle acknowledged the tensions in her comment “the context we are in has considerable power in shaping our external selves, identity and role”.

What are enablers for developing meta-cognitive practices?

Below are a number of technical aspects that helped to create a climate for developing the sort of meta-cognitive practice that deepens pedagogical understanding as described in the above discussions. However, they need to be considered in the light of the pedagogical stances and values as described in Chapter 2: Framing the project.

- Encouraging, creating opportunity and expecting the most of participants’ abilities through dialogue, a range of “tools”, and experiences
- Building in time and activities for deep reflection
- Building in opportunity and techniques (e.g. thought balloons, cut-out leaf shapes for writing assumptions, layered concepts such as the integral map, etc.) that can lead to meta-thinking and the voicing of that meta-thinking
- Structured activities using these tools in ways that encouraged the uncovering of deeply held assumptions
- The use of the tools was layered, meaning that participants came back to the different tools multiple times for different purposes, thus developing a deeper understanding of them,
- Building in an inquiry activity that participants chose and designed themselves provided experience and thus opportunity to use meta-thinking
- Requiring participants to present their findings and to give constructive feedback on each other from different perspectives again built in opportunities for critical thinking, furthering the development of ways of knowing and making evaluative judgments based on evidence – basic requirements for meta-thinking.

Participation and engagement was deep and continuous with each iterative use of different tools and activities designed to prompt deeper engagement. The programme design was underpinned by a valuing of each individual (e.g. participants were surprised, impressed and felt valued that we interviewed each person before the workshop in order to design the workshop to meet their needs). Underpinning the processes was the fostering of a dialogical community of practice, encouraging dialogical processes (as described in Chapter 2) and enabling dialogue to become “meta”.

In the project we saw a number of dimensions of meta-thinking, reflection and self-inquiry. What does it mean to cultivate this so that it is a constant practice? We consider three important aspects to developing a self-reflective practice:

- **Awareness of the frameworks which inform current thinking and new thinking**, as indicated in Bill's story and Philip's move from teaching programming to teaching programmers, how the curriculum models inform what CBT is and what other possibilities are.
- **Awareness of the experience, recalling, valuing, accepting the experience**. This makes the meaning of the experience obvious rather than dismissing it. Examples of this in the workshops included the use of thought balloons, reflecting on the ecology room experience, undertaking a small action research project, presenting it and accepting feedback.
- **Awareness of the importance of asking questions and questioning**, for example, questions regarding the self such as: What am I not considering? What new information do I need? In what ways am I trying new ways of feeling, thinking or behaving? How might I integrate these new ways into my life, my practice? Using the integral map when designing the action research projects prompted questions such as: What information do I need? By getting data from a particular perspective (I, We, It, Us), what am I not considering? Throughout the workshops and in the implementing of their projects, participants asked questions.

Deepening pedagogical understanding and professional growth

In terms of knowledge, our workshops and individual action/practitioner research projects resulted in greater system and context knowledge and knowledge of teaching paradigms and educational purpose (Schulman, 1987). In addition, and because you cannot separate knowledge from values, mindsets and becoming, each participant further grew their teacher identity and personal values, and stepped into the shoes of and became an inquiring practitioner (at least for the life of their project) (See Figure 3 – Meta-lens).

Taylor et al (2000, p.32–33) suggest five dimensions pertinent to the development of adult learners that foster a greater dialogical relationship with themselves, others and with knowledge. Below, we list these and describe how they were articulated in the programme:

Dimension of development	Aspect in the programme
<p><i>Knowing as a dialogical process</i></p> <p>Openness to others' ideas, surfacing assumptions, paying attention to wholes as well as parts, critiquing expert and one's own experience, reframing ideas and values that seem contradictory</p>	<p>Participants:</p> <ul style="list-style-type: none"> readily used a range of paradigms provided through different tools such as Map of dialogical inquiry, integral map, curriculum metaphors critiqued contributions by each other and facilitators identified tensions and contradictions and the implications for their practice
<p><i>A dialogical relationship with oneself</i></p> <p>Addressing fears of losing what seems familiar and safe, exploring experiences through frameworks of analysis, critically questioning one's own beliefs, values, roles</p>	<p>Participants:</p> <ul style="list-style-type: none"> let go of outcome-based expectations used a variety of analytical frameworks (e.g. see list above) Fettia recognised she did have some agency, Michelle began to feel more comfortable in her new work role, Bill questioned and let go his assumption that teachers had to be all knowing experts.
<p><i>Being a continuous learner</i></p> <p>taking risks, recognising one's own strengths and weaknesses as a learner, posing and pursuing questions out of wonderment, accepting internal dissonance as part of the learning process</p>	<p>Participants took a risk in undertaking their projects which involved doing something different from what was their norm and/or the norm of the context in which they worked.</p>
<p><i>Self-agency and self-authorship</i></p> <p>naming and constructing a values system that informs one's behaviour, accepting responsibility for choices, taking action towards one's potential. Naming and claiming what one has experienced and knows</p>	<p>Evident in the stories of Fettia, Bill and Michelle, albeit at different levels</p>
<p><i>Connection with others</i></p> <p>experiencing oneself as part of something bigger, engaging the affective dimension when confronting differences, contributing one's voice to a collective endeavour</p>	<p>Throughout the workshops a deep sense of trust was developed, enabling participants to find their voice, pose questions, and explore differences</p>

The professional growth that participants experienced was “emotional as well as cerebral... demand[ed] the capacity and strength to ask questions; to analyse and interpret feedback” (Dadds, 2009, p.37). So professional learning towards growth is far more than cognition, technical skills and systems. It is all of these and more; it involves morals, values, emotional learning and experience from multiple perspectives and in multiple ways (Villegas-Reimers, 2003).

Professional growth involves “challenging implicit assumptions and questioning taken-for-granted practices” (Webster-Wright, 2009, p.703), all of which requires a meta-language. A meta-language means meta-thinking is possible; this is a critical process in supporting continuing self-learning. Ongoing change in practices is the ideal outcome of such professional growth, and there is evidence of it in the stories of Bill, Philip and Fetta. To achieve professional growth, we need to deliberately create the conditions of trust, community, exploration of values and assumptions and moving in and through different paradigms to explore what is possible and what is missing.

Further, professional growth may lead to a greater appreciation and understanding of self, a greater sense of self-direction, alignment of goals, values and opportunities, and agency in one’s own continued learning and growth.

Theme 2 – Being human

We need to bring the human being with us. (Michelle)

A key theme that emerged unexpectedly from the project was the need to bring the human being into the picture. This has many dimensions, issues and levels. The following factors give us an idea of this complexity:

- The teacher/trainer being able to express and be acknowledged for her humanness – her heart, values, creativity, authenticity, capacities, journeys, culture, issues and tensions
- The way the teacher/trainer sees her students and relates to them
- The way the teacher/trainer is treated in her workplace and over the course of her career
- The design of the curriculum or learning to give space for both teachers and students to express, choose their own pathways, expand, grow, flourish and transform
- The type of processes used, the paradigms of learning, assessing and determining the success of programmes.

Michelle says her work as a manager of professional learning for trainers is firmly in the **IT** and **ITS** quadrants of Integral Theory – mediated by policies, outcomes, strategies, measures and regulations. There is little room for the human being. She

says to everyone in the project, “I will remember your faces and your stories. They will enable me to put a human face to what I do.”

Why is the human face not normally present? Is it seen as an unnecessary accessory, something that needs to be dampened because it gets in the way of performing a task or job? Are people commodities assigned to fill roles for the nation machine? What is normally associated with being human – weakness, pain, complaint – or on the other side, the capacity for growth, passion and greatness?

Figure 34. Integral Quadrant Theory

I – Why I do	IT – What I do
How I experience, feel, think, believe. value.	Behaviours, products, measurables
WE – Why we do	ITS – How we do
Relationships, shared values, cultures. norms	System dynamics, social systems. policv

Michelle spent the third workshop sitting in the **I** and **WE** quadrants listening to the stories of the others from those perspectives and giving feedback. She said it was a luxury to do this. It gave her the opportunity to play a role from other perspectives in a deliberate way that put in sharp relief the mindset from which she normally has to work. As the workshop progressed, she became more fluent in navigating the quadrants, naming the differences in views that each enabled, the resultant tensions between them and possibilities for new ways forward. The integral model provided a framework in which the human being could be acknowledged as a crucial (and strategic) part of considering the whole, not just a warm fuzzy component or a mass of errant feelings that have to be managed. She could draw on all her past experiences, roles and wisdom to create nuanced understandings within a greater integrated landscape.

So how does the **I** and **WE** give a different view? Michelle’s own journey in the project began by exploring the idea of *curriculum as currere* – understanding the learner as a person on a journey with a past, present, future, not just someone who is expected to achieve learning outcomes. This larger view of the learner caused her to question what might be the traits that occur naturally and those that need to be taught to make a good trainer. Her intent was then to make the IAL courses more efficient to match these findings – she was still, in part, viewing the human being from an enculturated commodity view, despite her own strong ethic of care. By the end of the project, after providing an ecology room experience for her work teams, her notion of the trainer’s journey had taken on a richness beyond providing information for efficiency improvements in training delivery. She was taken and

opened up by the individual stories, the battle scars, the deeply felt values, the pain, the searching for and sometimes not finding the passion or vocation, the squeezing of the self by the system, the potentials that might be realised if people could be allowed to grow. *“I thought I knew these people – I have now glimpsed outside of being transactional work colleagues.”*

What then are the tensions in herself as she takes this deeper quality of awareness and care back into her work? She comes up against her own performance criteria which are based on unchallenged assumptions about what makes a good manager. She finds in opening herself up to others, and trying to find ways to change the system to enable people to grow, that there are emotional disappointments – it is so much easier to have your head down and work on the **IT** and **ITS**. However, she tries to resist succumbing to this path because inside her is a deeper strength that comes from an emerging alignment or clarity of previously fragmented selves. This enables an energetic and purposeful alignment of her personal passions, work, study and her own drive for greater social justice. But she asks, with the weight of the system on her, can her own centre hold as she acts to be a transforming self, transforming the system? She senses that “flow” might be the answer, but how?

What does it mean to bring the human being with us? What capacities do we need to help us to do so?

Voice of complaint/what we really value

I am a suffocated and tired human being stuck in the system who would like to explore and experiment (Fettia)

Fettia’s story is a painful one. She is someone struggling in a workplace and system context where she not only has little room to manoeuvre to make change, but the way she is treated has dehumanised her. She feels and acts like a monster, yet she wants to express all she can be, to be playful, creative, to try new things and to discover a new self. While some people responded with empathy to her story, many said, “Stop complaining, get on with it, we all have to put up with this – do your job, or find another, solve it.”

It is a concern when such feelings of being suppressed and dehumanised are a common experience, part of the natural fabric of life, unquestioned. Are these generic feelings of suppression a signal or indicator about the wider system or context that should be taken seriously? Or is it a cross that all humans have to bear – that life is a struggle and to survive it, we cannot be our true selves, or at least not at work? Perhaps struggle is good for us, it makes us grow? Sue wrote:

There was a quality in the artefacts in the ecology room that impacted on people in the building beyond the participants of the project. I found myself listening to people in corridors, stairwells and off the record as they spoke to me of their painful stories and their aspirations. People cried, we held hands

and I gave hugs. I became a well for the suppressed, unnamed tears. It was not my intent that the workshops should have this particular impact or focus. Yet when it emerged, I felt that it was important to stop, listen, and understand what was underneath, not just from individual contexts but also cultural or historic contexts.

Kegan and Lahey (2001) say that behind the voice of complaint, there are deeply held values. Often, these are implicit, enculturated, and unquestioned. So in the tears we shed are the values by which we cannot live. By bringing these values to the surface, we can question them, reframe them and ask if they are the ones that we want to live by now. The deliberate living of them, with conscious awareness, gives us the opportunity for deepening our understanding of what they mean, enabling us to further reshape them to our growing selves. For Fetta, the project was an opportunity for her to connect back to these values, through her inner wisdom, and to re-examine them and to forefront them. The artefacts that she created helped others, both inside and outside the project, to also reflect on what they valued, opening up a new dialogue about how much they wanted to bring the human being into their working lives.

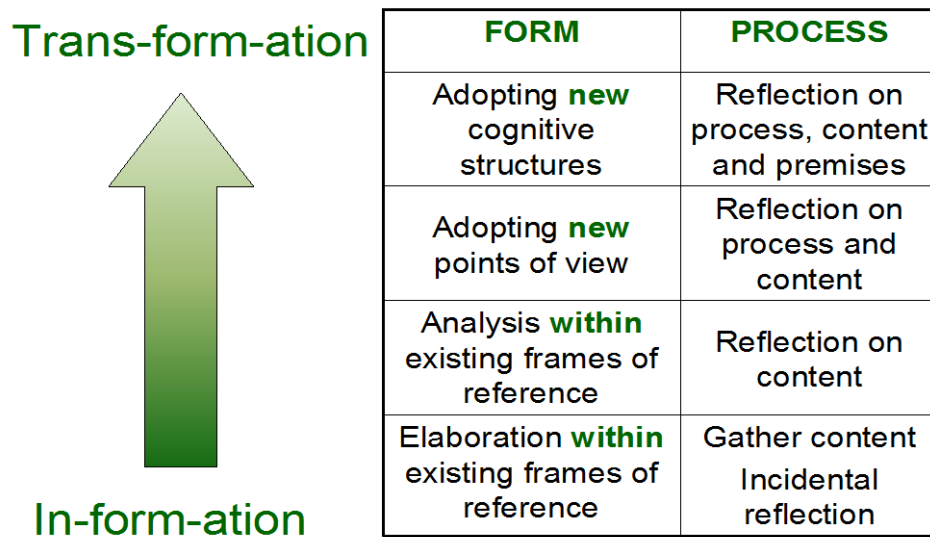
Figure 35. Fetta's Collage



But this illumination of values is just a first step. It is difficult to change and live values more fully when those around you are still seeing you through previous lenses, and when these lenses have created habits, behaviours, processes and procedures that lock you into previous ways of operating. It takes a lot more work to unearth the competing commitments, mindsets, and historic contexts that bind and draw us back into old patterns. The struggle may enable us to transform to new developmental stages, with higher perspectives and capacities, so that the problems are reframed within our new cognitive frames (Yorks & Marsick, 2000). But the journey to that new

frame may be too far away (Kegan, 2000), or the challenge too big for us alone. So while the answer might be to go and transform ourselves, the support of others and having the space to change are critical.

Figure 36. Information to Transformation
(Yorks & Marsick, 2000)



Aloofness/care/resilience

In the teaching profession we come across students with problems. We find ways to cope. Myself I always used to maintain a distance to protect myself. I carried that throughout my entire working life, an aloofness. I am there to help, but I will distance myself. Now the detachment has come back to haunt me. That is what is stopping me from being who I am. (Bill)

What are the experiences of care that cause us to sometimes prefer the escape of aloofness? To care may be to open yourself up to your students or to your colleagues, to be vulnerable to their pain, to know that sometimes you cannot help, and that if you try to help, you might make matters worse. To care may be to rail against the lack of justice or mercy, for example, against the blind application of assessment rules that do not consider the cases of individual learners and their needs. To care may be to examine your own self in a critical learning event, your motivations, the results of your actions, to perhaps feel ashamed of what you see and to aim to do better. To care may put you in tension with your job requirements, your colleagues, your boss. To care may be painful, as much as it may enable the flow of the human heart through the profound connections that can occur with another.

However, not to care has its downside. It is not just the cost of a dehumanised self, one that has forgotten how to be authentic and finds it difficult to hold on to its

integrity. It is also the cost of a dehumanised system where following the rules and the procedures to protect the system is privileged over the human beings it intends to serve.

When Bill begins to step into his authentic self and allow himself to care he finds a new relationship with his learners.

In this place of being myself, I am noticing more. Last session, I was preparing in the room, writing on the board and getting the task sorted when a student came 20 minutes early and asked for help. I was in task mode and said can we talk while I am doing this. He said "I'll go get a coffee." I stopped and realised that I needed to switch out of task mode and connect with him. So I sat down face-to-face and we talked through his issues. When he did his feedback form this was the thing that brought him most joy – it all happened before the class began. It made me realise that I get caught up in my thinking and tasks, and I need to be attuned to the relationship side. Take a more mothering role. Explore this role, listening in to when I need to do it.

I am beginning to notice how every person I come across comes with motivations, fears, preferences that are very deep seated, and which I would never be able to uncover very quickly. As a result, I need to find out, I need to give it some time ... I don't rush into things ... we must do this or do that. When I am working with groups, I am watching the process ... [I] allow the space for conversation to flow and deepen ... it is now connected to real obstacles and issues that people are experiencing. We are inquiring together.

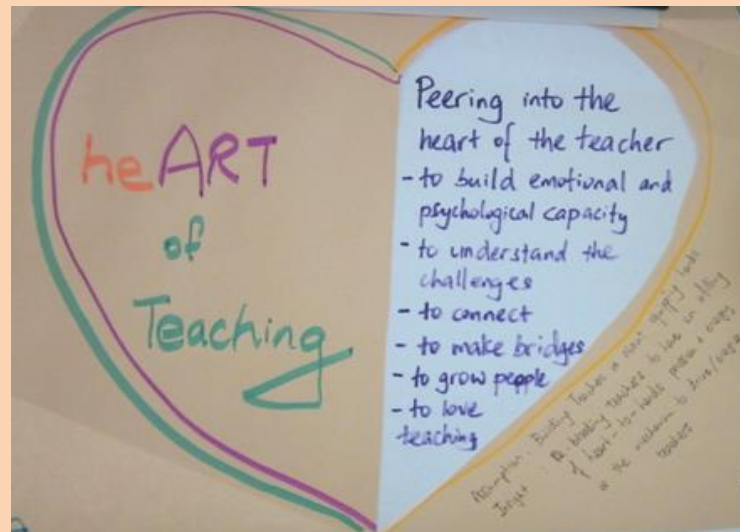
Caring is also a strong motivator. For Anita, a key incident that stayed with her was a student who complained about her feedback, saying it was “physically” harsh. The shock of the complaint caused Anita to reflect on her actions, step into the student’s shoes and pay more attention to the issue of feedback which provided a focus for her project. It gave her an understanding of her team and their approaches to feedback – the tendency to correct, to scold and to point out weaknesses in students. She was able to hold a non-judgmental space that aimed to help her team find new ways to think about feedback and the student-teacher relationship.

Jimmy, training and courseware design manager, hearing and seeing the painful yet heartfelt stories of trainers through the two ecology workshops, wants to acknowledge the heart, that care is an important aspect of being a trainer.

I am someone who wants to bring bright ideas and a warm heart (Jimmy)

How can we build resilience, he asks? How can we learn to care and to be human in ways that are self-sustaining, rather than suffering this weariness, these battle scars and disconnectedness? How can the system support us in this? Is it about ethical know-how, not just practical know-how?

What then does it mean for a system that enables growth of the ethical capacities in human beings? According to Stack (2007), key ethical researchers, Kohlberg and Gilligan, suggest that ethical know-how is developmental, and while tools and processes may help at different stages, the best means to develop capacities is to face and work through real-life dilemmas. How can we support people to do so? A key approach is to acknowledge that tensions and dilemmas are real for



Assumption: building teachers is about equipping hands

Insight: re-blooding teachers to have an in-filling of heart-to-hands passion and energy is the mechanism to drive/energise teachers

Kohlberg Stages of Moral Development

Stage 1 – Obedience and punishment – do it because it is the rule and will get punished otherwise.

Stage 2 – Individualism and exchange – do it because it gives me an advantage – I'll scratch your back, if you scratch mine.

Stage 3 – Good interpersonal relationships – do it because it is the good thing to do – love, empathy, trust, concern.

Stage 4 – Maintaining the social order – do it because the laws are there to ensure society functions.

Stage 5 – Social contract and Individual rights – question underpinning values and laws of society which may work democratically to change to more just laws.

Stage 6 – Universal (Kohlberg subsequently dropped off this stage as he saw little evidence of it.)

Gilligan's Stages of Caring

1. Caring for self
2. Caring for others – often sacrificial
3. Including themselves into their caring
4. Universal and abstract care.

From Stack (2007)

people, and are opportunities for learning rather than a language of complaint that needs to be turned off. It would also encourage curriculum that enables learners to bring the things that deeply concern and affect them, and help learners to frame these in ways that enable exploration of new selves as well as new understandings or skills.

Weakness/perfection/authenticity

We always hold the teacher up to impart knowledge to us. There is a lot of respect. It is all good but at some point something goes missing. We start to see learning as a task. I always thought I needed to be seen as a perfect role model, delivering the most innovative or interesting types of facilitation for maximum learning. Now I don't need to be perfect – I can be authentic. I can choose when to admit that I am not perfect, that things could have been better. (Bill)

One of the deeply held metaphors that came up during the project a number of times was the Confucian notion of the teacher as guru, on a pedestal, the expert, needing to be perfect. This makes it difficult for teachers to take risk with experimentation, as any failing is seen to lower the respect students have for the teacher, thus losing their trust in the learning process. In addition, trainers depend on good “happy sheet” results to ensure their re-employability. The expectation that the teacher is perfect and right also makes it difficult for teachers to hand over power to students for their learning, and to encourage critical thinking that challenges the teacher’s views.

For Bill, to be human is to have weaknesses, but work requires you to be strong, to look strong. He starts his project by writing reflections on his classes and sharing those with his learners (who are all trainers) to encourage them to understand the processes behind what he does. However, they are more interested in the fact that in sharing these critical reflections of himself and his processes, he is acting vulnerable, showing courage in doing so, and putting his uncertainties and questions out there. For some, it is disturbing as their own trainer identities are heavily tied up with being the expert in class. For others, it causes them to reflect on implicit assumptions about learning and about their enculturation into the guru metaphor. One learner says to Bill, “Coming off the pedestal gives you more credibility as a teacher.”

As a counterpoint to showing perfection, is it then about exposing your weaknesses? Brookfield (1995) suggests teachers need to be careful about this as it can backfire, undermining student confidence. Bill, however, finds a third way, discovering a way of teaching through being authentically present, one that gives him great joy. What is this authentic self? Bill says that his authentic self is more aligned throughout his life, he can be a joker, relaxed in his classes – “I have certain strengths, but I can be a human being, with weaknesses when I need to be.” But it is more than just being himself, he is also bringing a quality of awareness, clarity and noticing to each moment. It is about being present and mindful. He feels a sense of trust in his

learners, in the learning moment, and is able to sense how such moments add up to a greater interconnected whole. He is also a witness to his process, a commentator of that process for his learners (trainers) who also invites them to reflect on their own processes. He defines a new strength – *vulnerable, open, courage, integrity, listening, care, mindful, trusting, playful, reflexive, curious, improvising, joyful*.

How can he go against his own enculturation within a system that values respect and perfection and sees teachers as gurus on a pedestal? Contributors to his journey are

- a recognition by himself and his learners of this enculturation
- the initial processes that he uses – reflective practice and dialogue
- past experiences as an innovator and risk-taker in an organisation that actively supported innovation
- the processes he finds of being authentically and reflexively present, drawing on all his capacities and potentials for being human.

Bill's way is not the way for everyone, but shows what is possible in an environment where he is given freedom to work outside the rules of curriculum design, where he is trusted to find a way of mutual benefit. Bill can be his authentic self with an ethic of care for his students because he is already sensitive to this domain. His past aloofness to others was a protective mechanism, not a defect in himself that would cause his authentic self to be a diabolical joker and a cause of deliberate pain to others.

What sort of people do our trainers need to be if we are to trust them with being their authentic selves?

The expansion of the human being

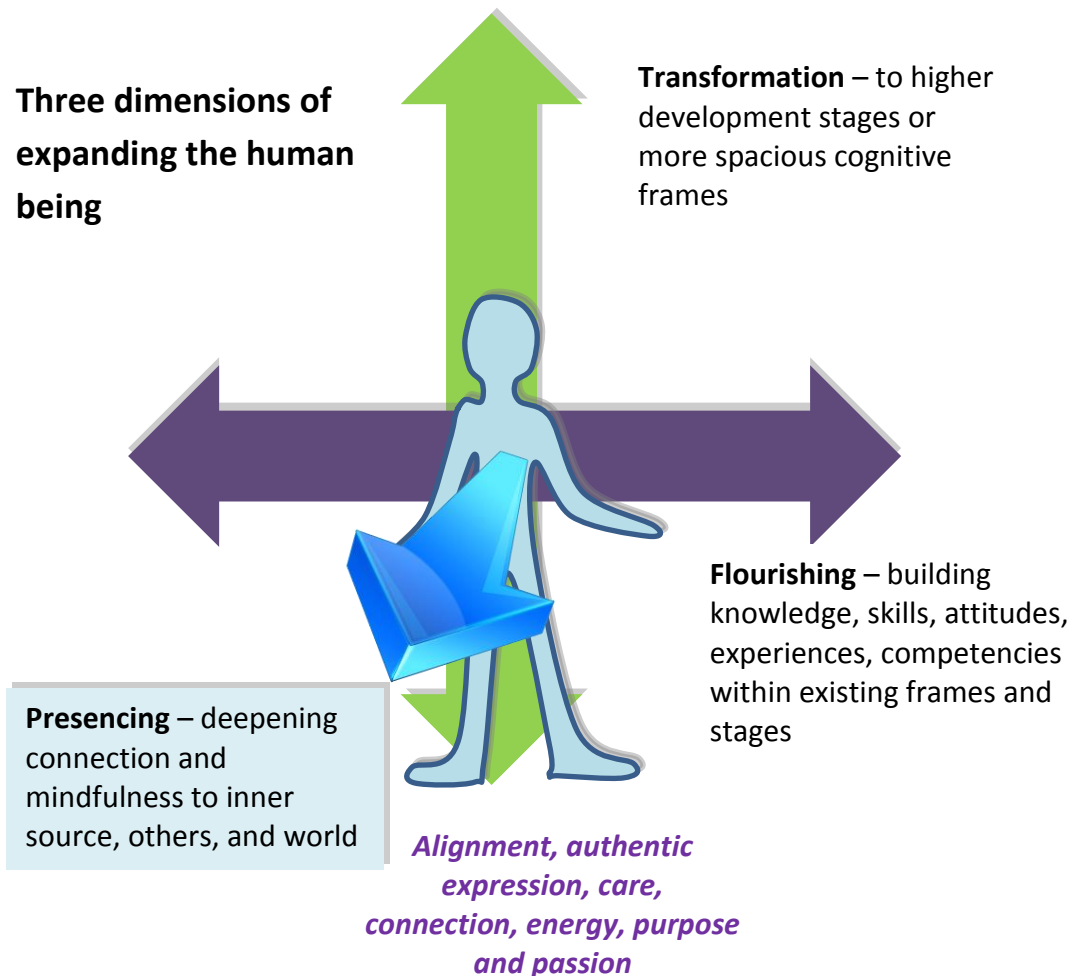
“When I was in China, standing on the beach looking out at the Pacific Ocean, I began to get a sense of how big the world is. I thought there has got to be room in that world for a little guy like me. It is not just about having a system in Singapore which supports us [as] grow old. It is about growing. How can we help to grow the system that can help grow us? For me, when I experience a sense of liberation within me, an ability to express my values, I have a power within me to help grow the system that can help grow me. If the system does not grow me, then something is wrong.” (Jimmy)

For a number of people in the project, a key aspect of *being human* and “*bringing the human being along*” is the opportunity to grow, to “become” – to *expand*. Three key dimensions of growth emerged from people's experiences (see Figure 37):

- **Flourishing** within existing developmental stages or cognitive frames – creating new experiences, building new understandings and skills, enabling new practice – good learning.

- **Presencing** – a greater awareness and connection with self, others and the universe, an opening of heart and soul that enables mindful relationship – an expansion of being
- **Transformation** into new cognitive frames or developmental stages, trying on new roles and identities, adopting new mindsets – an expansion in terms of developmental altitude

Figure 37. Dimensions of Growth in Being and Becoming



Flourishing

The flourishing dimension is the most common meaning people use when thinking about growth of the human being. Newman (1993) suggests that growth of this nature has nine key aspects:

- *Instrumental* – skills and tasks,
- *Communicative* – listen, convey, collaborate, negotiate, debate,
- *Affective* – understand our emotions,
- *Interpretive* – understand what makes us tick,

- *Essential* – apprehending the essence of things,
- *Critical* – appraisal, questioning power and assumptions,
- *Political* – making judgments to take sides, examining conflicts of interest,
- *Passionate* – harnessing emotions to motivate or put to wise use,
- *Moral* – knowing what is right and wrong and examining these assumptions

While other authors have different perspectives, Newman’s approach reminds us of the range of dimensions that are often not considered as measurable aspects of learning, yet nevertheless we see as important ingredients in the process of flourishing.

Presencing – presence in professional practice

Bill’s story illuminates an important dimension of expanding the human being, *presencing*, an expansion of being through connection, centredness, mindfulness and opening of heart. Although meta-cognitive practices provided an initial tool-kit for this process, Bill developed his own processes – a clarity from joy of noticing. His “being” is expanded through being centred, being present, being connected – connected relationally, connected to self, connected to a deeper source. This enables expression of his authentic self but is also bigger than himself. This gives him a sense of alignment with energy, purpose and clarity. He has a quality of minding a greater relational field of his learners and the class entity (*teaching as conversation*).

The presence of the teacher (as connection to self, as relational and as pedagogical connection) is well described in Rodgers and Raider-Roth (2006). This presencing dimension also links to the spiritual self as described in Stack (2007) – accessing dimensions of meaning, wholeness, creative expression, caring, values, connection, being at home in the universe, becoming, awakening – which assist the learning process and activate the holistic self. This quality of presence can be extended to the way we are present and relate in our wider work contexts (Senge, Scharmer, Jaworski & Flowers, 2004), enabling significant contributions to work through problem solving, innovation and generation of improved relationships.

Transformation – the transforming practitioner

For a couple of participants, the project provided stimulus and support for *transformative* change (in the developmental sense) and this has not been an easy journey for them, and is still continuing. The process of applying meta-lenses can destabilise the sense of self or call into question contexts that have been previously unquestioned. Profound learning for some can tear apart, while for others, it strengthens and energises. Having a meta-cognitive language to describe this process and also to name the new ways of framing the world seems to be helpful.

Are such transformations (albeit hard-won, uncomfortable, painful, confusing, liberating, enlightening) the aim of such professional learning programmes and that

of organisations intending to grow their staff? If so, programme facilitators need to be aware of the nature of such learning and the ethic of care required to support such transitions, even if the learning programme plays only a minor role in a larger life event. There needs to be valuing, understanding and support in the workplace, which may include mentoring, widening the person's job scope, offering opportunities to try out new identities and embed new learnings or perspectives. Further, if the transforming practitioner is doing so with an "audience" of learners, then the practitioner has another layer to navigate through with issues of how much to disclose, and how much to recruit learners for that journey.

It would be easy to back away from having to deal with such impactful learning. However, an example that many of our participants have quoted is the tension that arises when they (as trainers) want to give more power for learning to their students (*teaching as facilitating*) but students resist, preferring to be spoon-fed (*teaching as training, instructing*). Partly this may be a result of enculturated passivity of learning, past expectations, assessment modes, curriculum design and regulatory environments creating certain life conditions. But it may also be due to the actual developmental stage of the learners – they are not yet able to function well at *self-authoring* levels (Kegan, 1994) or at more advanced "ways of knowing" (Belinky & Stanton, 2000).

So the task of the teacher is not just to scaffold knowledge or particular learning-how-to-learn skills but also to be midwife to the transformation between developmental levels. However, where learning is modularised and atomised into skill-based competences, learners are unlikely to have access to an appropriate mix of challenges, skill-building, dialogical relationships, opportunity for trial in their own work context and supportive mentoring necessary for more transformative learning experiences.

Growing self in system

In an integral theory context, this expanding self is just part of the story of change – the I quadrant. How does work, system and national contexts and agendas support the growth/expansion of the human being – *transformation, flourishing, presencing*? It is critical, as Jimmy says, that we understand how the system acts to constrain or enable such growth, and design fluidity and flexibility into systems so that they can grow with humans, and help grow the humans who can then grow them. We need to see the growth of the human being as more than *in-form-ing* (with skills, knowledge, and attitudes) within

Support for agency through TLD programme:

- Tools to undergo projects
- Meta-cognitive and critical thinking practices to challenge frames and perceptions
- Critical friend support in helping to articulate issues
- Community of practice to share experiences, knowledge of the system and strategies
- Expectation to present project to the group with evidence of action or understandings

existing frames, which is the predominant metaphor of the competency based training sector.

What might it mean to consciously bring all three of these dimensions to the challenge of providing ongoing professional learning for the purpose of expanding/growing the human being? What might the shape of professional learning look like? What might be the role of individuals in creating their own life-long learning curriculum?

Theme 3 – The power of context and agency

“The context we are in has considerable power in shaping our external selves, identity and role.” (Michelle)

The context we are in involves multiple settings, perspectives, frameworks, rules (both formal and informal), intent, histories, practices and ways of working. We constantly negotiate our sense of agency between all of these factors, making judgments about what is appropriate, what is “right”, how much of ourselves we put into what we do. We navigate tensions such as those between values and practice, agency and system, identity and culture.

For the participants in the project, a key aspect of their learning was associated with praxis – putting something into practice within their own contexts, thus requiring agency to do so. The level of agency depended on the participants’ locus of control (and freedom), their position in their organisations, their understanding of their contexts and their perceptions of barriers (external as well as inner attitudes and habits). The negotiation of agency was, for many, complex and problematic – it was more than creating space for learning, it also became the content of learning.

For Bill, in his role as a classroom teacher, his choice of exploration meant little content and outcome change to his classes, and thus he had the freedom and individual agency to explore within the current curriculum framework. However, his praxis resulted in feedback from his context (his learners) that changed the shape of his inquiry. Philip surfaced his own historical experiences of grading to explore different ways to grade students. This initial interest developed into exploring peer assessment, different from the familiar institutional practices he was surrounded by and expected to use. However, in moving out of the locus of his classroom, his agency to bring this into his colleagues’ practice diminished.

Anita, in a manager role, had agency to recruit a team but little agency to change the working conditions that would enable them to meet. Anita’s project allowed her to begin the process of developing her clinical practitioners’ expertise in feedback, potentially changing historical practices from procedural processes to processes arising from critical thinking and new pedagogical models of the learner-teacher relationship. As Kirpal et al (2007) claim, forms of normative corporate identity have to be negotiated by employees which, in turn, can contribute to, or reinforce or

change corporate and/or vocational practices. It is this change in individual's vocational practices and the ripple effect of those they work with that is indicative not just of individual agency but of collective agency.

Fettia had very little agency to begin with, with the system and her organisation appearing to her as an impenetrable brick wall. In contrast, Michelle had a nuanced understanding of the same system that enabled her to move past rules and regulations, understanding the historicity and principles behind them to carve out a space for moral action. Michelle's advice to Fettia helped Fettia to find system mentors, build networks and find staff. Fettia's heartfelt issues helped Michelle to realise that it was not enough to contrive space for her own agency, but to expand her locus of care and agency to create conditions for others to have agency.

As part of executing one's agency, one comes up against barriers – some impenetrable, some fixed (and knowable) and some that are initially perceived but, with a change in mindset, can disappear. For Bill, his perceived teacher identity, built up from the historical/cultural legacy of the teacher as expert and the teacher on a pedestal, was something he was able to name and let go and consequently claim his authentic self. The coming up against these barriers can also give useful information about the system, cultures and assumptions. For some, the barriers required change in direction. For Anita, this worked well. However, for John, it limited his possibilities.

As Michelle notes, the context we are in has considerable power in shaping our role and our identity within roles. Being a trainer means adopting and internalising the values and forms of behaviour of what is socially recognised as a 'trainer.' The context we are in values particular forms of knowledge over other forms; encoded within this process are assumptions about the occupational identity of trainers that includes attitudes, values, and beliefs (Evans, Guile & Harris, 2009). In working with a given curriculum, facilitating/instructing in a particular knowledge domain and working with assessment tools within the institutional frame of their current employer and the WDA policy context, trainers are working with multiple and hybrid forms of knowledge, and are constantly negotiating their way through differing values and intents.

Like any of us, trainers are constantly producing and reproducing the system – its values and ethos – that they are a part of because the practices, knowledges, wisdom, ethos and values are a part of us. However, trainers also have agency to change practices, depending on the cultural capital (Bourdieu, 1977) and extent of collective action that is exercised. The enculturation of knowledge, ethos, the body of wisdom, system ways of being and institutional practices were evident in our participants' responses to the invitation to be innovative.

The participants were initially invited to think about possibilities for a project and were encouraged to be innovative with the support of the Director of the Singapore agency for quality assurance. The Director said to the participants that the agency is

outcome-based and there are many ways of achieving the outcomes. However, the response of a number of participants was no, “just follow the rules, just follow the rules”. Indeed, one participant changed his project from investigating peer assessment to a procedural exploration of using Skype to assess participants. He explained to the group that undertaking peer assessment would require the approval of the Singapore agency for quality assurance, and he did not have the time or resources to undertake what he saw as being complex, difficult and time consuming negotiations with the agency. Even with the Skype option, he still brought in participants to his institution to Skype for their assessment as it would otherwise “be a breach of rules”. Such stories indicate the perception of tight control over levels of detail rather than principle that the agency is perceived to have. This policy context is a form of knowledge that trainers work with. Examples such as this suggest that strict adherence to the rules is valued at the expense of learning and what is best for learners.

Similarly, Marie’s story of her learners being bored with theory, and the divide between theory and practice, arises *in part* from the ways in which standards are written (in a number of countries, including Singapore) such that underpinning knowledge is separated from skills or demonstrable competencies, that is, there is a theory/practice divide.

Fettia explains that:

Our curriculum was developed in the past primarily to get accreditation to meet all the requirements of the Singapore agency for quality assurance. There is not much thought put into different learning styles or the developmental aspects of learning. The framework is skewed towards reinforcement and conditioning to bring about desired behaviours and transfer knowledge. It does not encompass the learner-centred paradigms of humanism and constructivism.

Here, she suggests that predominant in the design is the need to meet the requirements of the Singapore agency for quality assurance. As part of a government agency, the agency has an auditing and curriculum accreditation role. Because curriculum is accredited, it seems that this and the auditing role have come to be at odds with meeting learners’ needs. Different training providers interpret these requirements quite differently and give different messages to their trainers. For example, Bound (2010) found that one provider encourages facilitation to meet learning needs while another provider has conflicting messages. On the one hand, their trainers are expected to be creative. Yet, on the other hand, management reported that nothing in the curriculum documentation can be changed, as this was their interpretation of the agency’s requirements. Bound comments that trainers perceive that “change is difficult and perhaps best avoided” (2010, p.40).

Fettia also states, “*The ACTA assessment module acted to shape us rather than grow us.*” When we look at the ACTA Module CU6 Conduct, a competency-based assessment, we see a definition of competency that refers to knowledge, skills and attitudes “required to perform the activities of a given role or fulfil a particular job function effectively” (IAL, 2011, p.10). This understanding of competency is based on behaviourist and cognitive perspectives that assume knowledge is static, ignores the dynamic and socially constructed nature of work and does not focus on the learner. Assessment in CU6 is defined as “a systematic process of collecting information about a learner’s progress and using that information to make a judgment as to whether an individual has achieved a desired level of competency” (p.14). This definition is somewhat at odds with what follows with the reference to “assessment for learning”. Overall the CU6 privileges the procedural knowledge required to conduct an assessment with little valuing of theories of assessment and their implications for learning and assessment practices. Fettia’s claim that the CU6 “acted to shape us” is a reference to the privileging of procedural knowledge with little or no opportunity to develop understanding, in this case, of assessment, that could “grow us”. This institutionalised wisdom becomes part of the cultural capital (Bourdieu, 1977) of those within institutionalised structures and practices that, at the same time, is reproduced and challenged by observations such as Fettia’s. Bill describes these practices in the following description.

Now I operate in a Workforce Skills Qualification (WSQ) environment, pre-occupied with coverage, evidence, outcomes, standards, mandatory qualifications, training numbers, training and assessment specs. There are corporate logo-themed slides, thick learners’ guides and tie-wearing assessors and trainers.

This observation sees the system as one that does not include learners and learning. A system will, of necessity, be concerned with such matters as Bill lists. However, Bill’s concern is that the system does not readily forefront or allow for spaces and processes where learning, and particularly a joy of learning, is the focus. He observed that his learners were giving feedback such as the following:

no breaks, tough assignments, practicum and capstone project all consuming. By the time I see the learners in the later units they seem dead; lights are on but no one is home compared to the bright-eyed and eager people who started out.

A combination of readiness for change, of seeing and experiencing innovative facilitation and a work environment that is supportive of doing things differently enabled Bill to ask, “How might I challenge some of the system constraints and competency paradigm to create some space for joy in learning?” Bill reflects that,

She [Sue] threw all assumptions about training on its head and introduced curriculum metaphors and meta-learning. Possibilities about training and

learning expanded for me. How can I leverage on joy of learning? How can I encourage meta-learning?

Not only seeing and experiencing how you could facilitate differently, but the opportunity for dialogue as part of a collective contributed to Bill's pedagogical knowledge, his interpretation of the context and his agency within it.

Perceptions of the system constitute contextual knowledge that trainers work with, which in turn influences attitudes and assumptions about learning, design of learning and facilitation. A historical legacy has been created that works strongly against innovation and creativity. Jimmy's observation that being able to express his values gives him power to grow the system is an astute reminder that we

"How can we help to grow the system that can help grow us? For me, when I experience a sense of liberation within me, an ability to express my values, I have a power within me to help grow the system that can help grow me. If the system does not grow me, then something is wrong."

Jimmy

must give room and trust in people's abilities, passion and commitment. When there is greater alignment between our own values and those of the system within which we work, there is greater opportunity for creativity and innovation. As we interact with others, with different systems, settings and their values and intent, our interaction is governed by rules, social values and norms and these shape social identities (Goffman, 1968, 69, 72). The "work collective" can have a major impact on an individual's functioning in the workplace (Evans & Bound, 2012).

The introduction to this report lists a number of constraints cited by our participants. This section further expands a number of these contextual constraints, but we have conceptualised these constraints not as "outside" the individual but as a system and structure embodied in individuals and collectives. Structure exists only in and through the activities of human agents (Giddens, 1984). Thus it is possible therefore for individuals and collectives to either reproduce those constraints and/or challenge and potentially change them. Jimmy's question, "How can we help to grow the system that can help grow us?" is an important one. The message in this report is that trainers feel a need for greater alignment between themselves, their values, their roles and their work. The process of gaining greater alignment requires a number of different strategies further discussed in the next Chapter, but a must is the creation of time and space – everyone spoke about the pressure of time and too much work – and greater flexibility within the system along with a system that has a listening ear.

Chapter 7 – Implications for Professional Learning

What tools (e.g. heuristics) and processes are helpful in facilitating meta-thinking about teaching and learning?

Many different “tools” such as heuristics, visual tools, metaphors, activities, processes and environments were used as part of the facilitation of the first two workshops. They helped to make more visible the mindsets that shape the way we think about our learners, about learning and teaching. We gave the participants time to experience and practise in new contexts with heuristics such as the dialogical inquiry model, surfacing assumptions on paper cut-out leaves or critical friend conversations. Those tools that we think are valuable and which can be repurposed, we have described on the website – and there are a lot of them. These can be used in both professional learning programmes for trainers as well as by them in their classes.

Probably the most significant tool were the mindsets or orientations that we, the facilitators, brought to the design, our own attitudes towards learning and learners which shaped the experiences, relationships and the different themes that emerged. For this reason, we have tried to spell out some of the behind-the-scenes thinking in the previous sections of this report. For example, Sue drew strongly from holistic, integral and complexity science inquiry models (Stack, 2007) in choosing the focus and approach of different activities for the ecology room in the first workshop. This enabled people to engage in surfacing pedagogical knowledges in an experiential way, while also experiencing an alternative paradigm of learning. Brookfield (1995) encourages critical reflection as part of teacher inquiry practice. However, we felt a process of surfacing and challenging assumptions might be too destabilising, emotional and associated with blame. Thus we wanted to counterpoint it to other more life enhancing approaches, drawing from Henderson and Kesson’s (2004) seven inquiry modes.

The ecology room activity was one of the most powerful experiences in opening up potentials, new conversations and inviting the holistic self to be present, having a profound impact on participants and many others who came into the room. The resultant “art gallery” space that was created from the activity became the preferred working space for the participants in contrast with the corporate training room space, and we recreated this comfy room with the pink couches for the second workshop. It engendered a very different approach to learning, one that enabled pairs to work quietly together, or people to be in their own thinking space, or to engage in group activities that were both physical and conversational. From this, we believe it is important when requiring people to do profound thinking that aims to align values,

concerns, systems, cultures, passions and intents that they have a welcoming visual and experiential environment to work in.

Figure 38. The Ecology Room Workshop



A slightly repurposed ecology room that was run a second time with a different cohort also had a similar profound impact. This is the method we would recommend as a key experience that could help professionals orient themselves to their pedagogy.

We also employed further heuristics to help people understand themselves in context with the past, present and their desired futures, drawing from Futures Studies (Slaughter, 1996) and the notion of *curriculum as currere*. This was highly useful in helping the participants to orient themselves powerfully to their projects. It also highlights that the tools we used, which may seem quite simple and visual, had strong informing theories behind them linked to understanding the deeper issues associated with facilitating change in mindsets and practice.

Another key aspect was cultivating a *culture of meta-cognition* through conversation, drawing on visual tools and metaphors and building meta-language. The first time the participants were asked to think about their assumptions came as a bit of a shock to them. But with practice, they became accustomed to engaging in meta-thinking not just about themselves, but also about the processes we were engaged in such as the relationships set up by the facilitator/learner roles and researcher/researched roles. Such a culture meant that conversations that might be seen as critiquing the teacher could happen in an open way and people could take ownership and contribute to the creation of learning opportunities for others. However, meta-thinking and conversations about pedagogical knowledges was initially hard thinking for one participant. We were pleased that on the final workshop, she threw away a “learning edge” chart as the artefact she felt she could discard, having grown beyond it, “I am out of the red zone”.

However, while it is easy to engage in meta-conversations with the group and the facilitators, it is another thing to maintain it as part of individual practice in the workplace. The things that occupy us everyday conspire to make us forget to lift ourselves into a meta-space. The lack of work-place conversations of this nature makes it difficult to practise this level of conversation with others. Conversations become more task-oriented, procedural exchanges, and contain more pushing arguments than being explorative. Further, those still enculturated in the socialised self-developmental stage may only think from new frames in a cohort that lifts them up through Vygotsky's zone of proximal development. But when they return to their workplace environment without that peer support, it is unlikely that these new developmental frames will consolidate.

This highlights the importance of cultivating a community of practice where the quality of conversations can continue, and where new people can become inducted into a culture of meta-cognitive inquiry and conversation, enabling the building up of meta-cognitive language.

During the practitioner project phase, different people drew on different tools they were exposed to, using them as part of personal reflection, as approaches to use with their trainers, as data collection approaches and as evaluation. These are listed in Table 2 of practitioner research projects in Chapter 4. Each of these repurposing of the tools to new contexts provided interesting affordances and insights, including how to use them more effectively. The stories in Chapter 5 tease some of these out.

What we learnt is the importance of giving a range of new tools and approaches, rather than focusing on a couple, and having ones that range from fairly simple concepts (e.g. cut-out thinking balloons) to the more complex heuristics. Thus the participants could select ones that suit their contexts, and we found what they chose often quite surprising, for example, using a guided visualisation prior to asking students to reflect on their learning. What people valued was the freedom to select and be experimental.

What have we come to value in terms of participant outcomes?

When running a programme that is based on an emergent paradigm of learning, it is often not possible to understand what may be possible and what is valuable until the end. This then enables the development of learning criteria or outcomes that can be used as starting points for consideration in future programmes of this nature. In terms of deepening pedagogical understanding, the following are some core elements that we have seen from participants that may be used if we were assessing such a programme.

Criteria:

1. Using meta-language and meta-cognitive practices to deepen understandings and as part of professional practice. For example,
 - ability to demonstrate it within the workshop settings in conversations with others, as critical friends and in their reflections of their own learning during the final presentation of their project,
 - using it naturally as part of their own self-reflective practice in their workplace,
 - developing their own processes and tools, or using meta-language or tools with their trainers.
2. Situating practice and goals within an awareness of an orientation to teaching and learning paradigms, to their own values and purpose for learning.
3. Developing a greater understanding about learners, system dynamics, curriculum possibilities and frames, domain knowledge, teaching/learning approaches, research inquiry modes or pedagogical content knowledge
4. Growing confidence in doing practitioner-based research and commitment to continuously bring inquiry into their own practice (we saw various proficiencies in the rigor and depth of the research).
5. Meeting their own goals to their satisfaction, or learn from the attempt to do so, and to modify goals appropriately to emergent signals. Here the participants would set their own criteria on how they should be judged, which could relate to products, understanding, improved outcomes for their students, new practices or mindsets, or growth of self.
6. Taking on greater leadership roles within their organisations or within the greater system, bringing their understandings/products to improve training potentials.
7. Contributing to the understanding and enaction of the group's community of practice – creating a greater whole from which all participants can take away into their own contexts.

What should be emphasised is that each person came into this programme with very different capacities in terms of Shulman's (1987) teacher knowledges compared with each other. This project was not about getting people to the same level of competency at the end. Rather, it aimed to help them build their capacities from where they were, along a trajectory of their choice and focusing on teacher knowledges that became important to that journey. Thus the "measurement" of outcomes here is more about "change" rather than acquisition.

What did participants value about the programme?

The following provide a snap-shot of what the participants valued from the programme.

Characteristics of the experiences:

- Getting in touch with the holistic self – connect to own values, enabling a self-examination using holistic inquiry, being able to be expressive and vulnerable
- Having the space to think, quiet reflection times and time to reconnect with their own values and questions
- Layering, iteration and reuse of different tools in new contexts, enabling experimentation and practice
- Modelling of various practices and teaching approaches, enabling experience of how different teaching/learning mindsets and values can articulate in practice, with invitation to bring critical reflection to them
- Quality of the dialogue – within the workshops and during the project phase with critical friends
- Emerging ideas, possibilities and new ways of framing things – the surprises and insights
- Trying out and adjusting within their own practice
- Relationship between us; caring and timeliness, building relationships over time
- Design of sessions being emergent from previous ones
- Facilitators attentive (most of the time) to what was arising, and enabling discussion and unpacking
- Opportunity to run sessions for others
- Opportunity to take on roles and perspectives and see them played out
- Opportunity to be in a group of professionals inquiring thoughtfully into their own practice
- Opportunity to see and contribute to a greater sense of the whole

Structure of the programme:

- Pre-interviewing participants to inform the development of the programme – the programme being based on their needs and contexts
- Practitioner research – opportunity to do one's own project
- One-on-one support during the programme – providing just-in-time help, new knowledge, pointing to resources or critical friend conversations
- Programme was done over time, thus giving time to arrive at own concern, explore new ways to frame and modify it in the reality of the workplace context, giving time to make interventions and collect data
- Role of the workshops in framing and bracketing the experience
- Flexibility in the objectives and focus of the practitioner research – removing the boundaries of what it should be about, and giving people full scope to explore what emerged for them
- Being able to contribute to real issues in their workplace and at a wider system level through the IAL research element.
- The trust facilitators have for the participants to find their own paths and in the value of the emergent journeys
- Development of a sense of partnership in an enterprise together – moving from a teacher-student relationship to collegial relationship.

What are the affordances of such a Professional Learning programme?

- Better articulation of pedagogical beliefs, intents and origins
- More nuanced understanding of system dynamics and cultures
- Change in mindsets, practice
- Being able to adopt and trial in the workplace
- Contribution to professional dialogue, networking
- Developmental growth
- Better alignment of purpose, values, practice
- Creative new products
- Impact on student outcomes or others
- Development of own indicators and goals for own learning
- Self-inquiring practitioner skills
- Learning that becomes embedded in work-practice
- Networking
- Being able to compare own contexts and experiences with others and bringing their perspectives into reframing own issues

What are the issues and potential opportunities?

Community of practice

Although the participants appreciated the collegial dialogue during the workshops, there was a difficulty in maintaining a community of practice during the project phase through the wiki as intended. The Wiki became a repository of participants' research rather than an on-line discussion opportunity. Email communications were the preferred communication. People had little time, and the wiki technology was too new for some. Asynchronous communication does not necessarily enable the deeper dialogue that is possible with synchronous communication.

Collegial dialogue is an important part of practitioner-based research and we believe that this needs to be structured in more formally to such programmes in the future as discussion with peers can illuminate common issues and provide juxtaposition of views. While the critical friend conversations undertaken with Sue and Helen helped people deepen their thinking, it is also helpful to engage in a community of practice dialogue. For ongoing professional learning, the access to quality collegial dialogue is important, yet time constraints often compete against this.

There is a tension between providing extrinsic motivation through making it become an assessment requirement and fostering intrinsic motivation to engage with a community of practice. Jimmy's project revealed that when trainers completed a course together over an 18-month period, they wished to continue the conversations and collegiality, and arranged themselves for regular meetings. How can we better recruit such longer term shared experiences and relationship-building?

How can we better enable collegial dialogue beyond the classroom environment?

Lack of time for participants to do project

For many of the participants, the pressure and demands of work prevented them from having the time and space to think about or conduct their projects in the more extended ways they originally intended. Possible causes included a lack of understanding at the beginning of the project of the time commitment for the project phase because it was not "scheduled" learning, lack of support from their workplace and enormous workloads. Many of the participants went back to work after the workshops with one staying until 3 am to do a full day's work, arriving back at the workshop at 9.30 am the next day. Such realities do not help foster professional learning.

How can organisations better support such programmes, giving time from work to attend workshops, and time in the workplace? How might organisations be encouraged to value the contribution the individual makes at work as a result of her projects?

Big inner change, but little outer change

As in other studies of this nature, the visible achievement of enhanced workplace outcomes might not be as evident initially as the investment in the professional learning might warrant. However, what is happening is considerable inner change – change in mindsets, in ways of framing issues, in ways of seeing and relating. It takes time for people to adapt to new roles, or bring these into their everyday practice, particularly when they may no longer be on the same wavelength as those around them and experiencing resistance to their ideas or need for larger roles.

On the other hand, a small intervention within a classroom context, such as Bill's administering of a questionnaire based on a different mindset compared to the usual "happy sheets", can create enormous potential for change.

What support is needed by organisations to help people bring their new perspectives into what they do, giving space for trying new roles and responsibilities? How can we provide learning for trainers who have the potential for a mindset shift?

Traction of the research into the organisation

Workplace teams engaged in practitioner research are likely to be more effective than isolated practitioners. They have greater numbers to garner organisational support, provide a critical mass that can impact on other colleagues, support each other through collegial dialogue and focus on a common context and concern. Thus, the preferred model for action research is to recruit a team, organise regular meetings, and seek critical friends or stakeholders to participate in some of the dialogue sessions.

With three people attending from one CET Centre, they created a key centre that could create traction in their work-place context, even though their topics of research were different. Anita was able to recruit a team of three others in her workplace, and they were able to look at a common interest. However, time constraints, with projects like this as "extras" inhibited scheduling of team meetings, and they missed out on the benefits of group dialogue and were only able to do one cycle of action research. Although part of the practitioner research encouraged seeking critical friends, supportive colleagues and managers in the workplace, this proved too difficult for some. They ended up being isolated practitioners. For Philip, there was room for him to explore his own practice, but not for Fetta.

What cultures in the workplace need to change for team workplace learning of this nature to be recognised and supported?

Diversity of projects

There are advantages as described above in having a workplace team exploring the same issues together. However, the diversity of the projects had a number of affordances:

- Each project provided a probe of the system, coming up with different angles and understandings that enabled a larger sense of the whole to emerge. This included more nuanced appreciation of the dynamics between policies, cultural legacies, organisational behaviours and teaching and learning practice. There was resonance between projects of some key themes and issues, and findings from some projects helped to build understanding about issues in another.
- The different projects, alongside a group-learning culture using meta-cognition, kept alive different perspectives that enabled participants to reflect dialogically about their projects.
- The non-homogeneous group of learners, with different initial teaching knowledges, enabled learning to occur from each other.

Despite the diversity, there were commonalities – the opportunity to think big and outside the box before focusing on a particular project and an emergent shared language. Thus an orientation programme that enables people to think beyond their own initial framing of the issues is important. However, once people start their projects they could be directed to other professional learning within more homogeneous interest groups that can support their specific needs. For Philip, until he started this programme, he had no sense of his question, but once he had worked out that peer assessment was his focus, he might have benefited from a short module on peer assessment, and this is something he could still benefit from. For Michelle, she was co-currently beginning her post graduate course in narrative inquiry methods and this acted synergistically with the TLD programme in helping her shape both the TLD project and her future research focus, providing specific skill development.

How can a programme like this (helping to frame goals within bigger contexts and then supporting self-directed learning in the workplace) be used in conjunction with more specific skill-building learning opportunities? How might trainers be encouraged to develop long terms plans and what mentoring relationships could support this, helping to direct them to suitable learning opportunities?

System constraints

Alongside constraints that participants experienced in their workplace are a number of constraints due to wider system issues – the large number of private for profit Providers who operate on a business model rather than a focus on educational governance, the accreditation and regulatory environment, the mobility of teachers

due to their mode of employment as associates, the “happy sheets”, the separation of courseware design and teaching, and standards that encourage a focus on small bits rather than larger wholes. These acted in some cases to change what could be innovated, the scope of innovation and the traction of innovation within the workplace context.

Although participants flagged many of the issues at the beginning of the programme, issues still remained that caused people to change what they could do. For example, John was hopeful of pulling together a range of atomised modules in leadership courses in order to create a coherent framework that would encourage professional development over time. However, he expressed his concerns about getting permission from the Singapore agency for quality assurance without a complex reapplication process that would require considerable time, effort and argument.

It should be recognised that although training adjuncts make up a large proportion of the training population in Singapore, the people who could be part of a programme such as this (practitioner research within the workplace context) are those in longer term employment with some managerial power or agency within their organisations. Even though they face considerable constraints as a result of organisational, systemic or cultural factors, adjunct trainers face an even bigger constraint of not being able to even be considered for programmes like this because of their lack of agency within their organisations.

As a result of the projects, we have now a far more nuanced understanding of the dynamics between many of these constraints. It is a complex interacting system of self-sustaining policy, regulation, culture and mindsets, mediated by different workplace contexts. It is clear that there are no easy fixes or single silver bullet, though naming the issues, the hidden underlying assumptions and some of the dynamics is a start. A multi-layered approach is needed which may include changing governance conditions, building the status of trainers, providing incentives, providing support and leniency with QA to enable innovation cycles, educating organisational leaders and building the human face of the system (connections, mentoring and partnerships). Underlying this is a need to question underpinning assumptions and to vision values that we would like to carry forward. In asking how can we create more space, inclination and out of the box thinking to innovate, we also need to keep in view what we are doing it for.

What processes with stakeholders might help support the development of a systemic approach to the issues of developing professionals, providing a climate for innovation, fostering excellence in teaching and learning?

Facilitation/research tensions in developing new professional learning programmes

Our intent was not originally to develop a new model of professional learning, nor a new approach to developing a new course. However, in many respects, we have done both. The piloting of the project was based on emergence – first identifying a concern, framing intent, then modifying this in collaboration with a cross-section of trainers, courseware designers and training development leaders in Singapore. Such an action learning approach is able to sense and name the specific and shared contexts and issues, and to create a response to that, developing a sense of what is valued and what might be useful for the next time. Although in many ways, it seems like a “running by the seat of your pants” model, the tools and processes that we used during it provided a rigour and depth.

Although, in designing new curriculum, it is important to establish a stakeholder group upfront, in this project, as the project direction changed, key stakeholders emerged.

For us, the authors, a key challenge was the juxtaposition of the different roles we needed to take on in the project – facilitators, innovators of a new professional learning model, researchers and self-reflexive practitioners. While these often supported each other, there were also times when they competed – with each needing different orientations, different criteria (what does success mean here) and different focus on the ethic of care.

In creating an emergent programme, it required considerable time, money and emotional investment. Further, we did not have a firm set of criteria from which to understand how and whether the programme might be working and at what level of the very many layers that were operating. Part of the emergence was realising how entangled we were in the deeply embedded CBT culture of set learning outcomes and competence, which gave little room for programmes based on *curriculum as experience, currere, or conversation*, which have different measures of success.

Is this approach to designing new professional learning worthwhile? Where there is a block in the system to growth, then approaches like this can offer much more than a programme ready to be rolled out. It can foster greater dialogue about what is valued and an opportunity for re-visioning of processes, intents and framing metaphors. There is a definite role for the research/design/training programme/user nexus in helping to push beyond existing thinking in training delivery.

Where might researchers, trainers, designers, quality assurers, and users work together in similar exploration of the system in the future?

Measures for joy of learning, bringing the human being

A key finding of this project was the revitalising potential of bringing trust, joy, humanity, creativity and community into learning through the valuing of the human being. However, in a climate where performability measures are linked to economic bottom-lines and things that can be measured and given numbers, this human dimension can fall by the wayside. In Bill's presentation, a question was asked on whether there could be a "joy of learning" index, indicating the prevalence for needing to codify the things we value into measurables or KPIs. The ineffability of these qualities demands a new type of approach and valuing that is more evident in the stories we feel we can tell and share, the culture of our workplaces: the warmth, the passion, the initiative and creativity.

How do we keep up front what we deeply value although they are not easily measured? How do we know when they are happening? What possible affordances might be possible if we enable space for emergence? What are indicators that these values have been left by the wayside?

New curriculum metaphors for professional learning

As a result of this project, we are now able to reconsider the two metaphors for professional learning that we flagged in the introduction – *professional learning as delivery* and *professional learning as growth*. We now suggest that there are two others:

- ***Professional learning as delivery*** – provision of skill-building or content-based courses – knowledge can be seen as a commodity and humans as economic units to be developed
- ***Professional learning as growth*** – the individual is seen as person, a part of many wholes with a life trajectory of learning
- ***Professional learning as praxis*** – professional learning or growth that comes out of investigating and changing one's practice or changing the contexts surrounding one's practice. This enables participants to actively contribute and build systems while engaged in their own professional growth.
- ***Professional learning as dialogical inquiry*** - professional learning that is conversational and within a community of inquiry, and which enables dialogue between different perspectives and possibilities

If we wish to move beyond the metaphor of *professional learning as delivery* to *professional learning as growth, praxis or dialogical inquiry*, then we need to look carefully at the tensions between trying to operate within the existing *curriculum metaphors of content, discrete tasks, outcomes and learning activities*, while moving to *curriculum metaphors of experience, currere (past, present, futures), conversation and social reconstruction*. The latter metaphors require a different approach to the measurement of competence and performability.

Figure 39. Professional Learning Metaphors



Professional learning as delivery can still have a place within a wider framing of what professional learning can be – providing appropriately structured learning opportunities. Thus there is a complementarity between these different professional learning metaphors. *Professional learning as growth* provides a sense of overall individual direction and purpose. *Professional learning as praxis* provides an opportunity to contribute to collective endeavours. *Professional learning as dialogical inquiry* provides the process glue between the different metaphors (marrying different goals and voices between agents).

We would suggest that a holistic approach to professional learning would consider all these dimensions synergistically. In Figure 39, we show how these four metaphors might work together. In the inner darker circle are specific systemic strategies that might support these, and in the outer circle are some of the reasons or values behind these.

The key conversation then needs to be a “values” conversation. What is it that we – researchers, trainers, designers, leaders, quality assurers, work place managers – value from the participants’ stories about their learning and their journeys? What is it about what the participants valued in the nature of the programme that we would like

to preserve? What then might be necessary to support this in a cultural, systemic and visionary sense?

What questions should we be asking?

Chapter 8 – Discussion and Recommendations

Context for recommendations

It is interesting to note that the IAL Quality Assurance Taskforce (2011) recommended the following:

- Create opportunities to share good practice in course teams within the IAL, with other providers, with framework developers
- Make the identification of good practice a part of all reviews
Dare to innovate, create a laboratory for new practice, reflect and research, share ideas (p.6)

These recommendations highlight the need to develop and share good practice and to be innovative. These are messages that are supported by the findings of this report. Our findings also resonate with the work of Frank Coffield (2008) who, in relation to the British learning and skills sector, asks, “Just suppose teaching and learning became the first priority ...”. He opens his report with the following comment:

We are all familiar with current practice: ritual genuflection is made to the central importance of learning, but the sermon swiftly becomes a litany of what the government considers to be the really key elements of transformation – priorities, targets, inspection grades and funding – and the topics of teaching and learning disappear from sight, as if they had no momentum or dynamic of their own. If they are mentioned further, teaching and learning are treated as unproblematic, technical matters that require little discussion. The unspoken assumption is that we can all recognise and disseminate “best practice” without any difficulty. (Coffield, 2008, p.1)

Participants in the Tools for Learning Design project likewise expressed a sense of being overtaken by a system that values the following of rules and the need to find ways of working around system constraints, all of which limits innovative good practice. What we mean by “good practice” is a dialogue we need to engage with and among CET practitioners and policy personnel. The different worlds of bureaucracy and trainers and curriculum (read courseware) designers bring very different lenses and values to the table. It is important these worlds talk to each other if we are to meet the Economic Strategies Committee’s recommendations for focussing on productivity and innovation.

It needs to be recognised that this is a “wicked problem”. It is a complex system with multiple dimensions, paradigms, levels of the system, stakeholders, time frames, values, and changing contexts. The system dynamics has many reinforcing behaviours and cultures. Opportunity for innovation is limited without a systemic approach that addresses classroom learning cultures, curriculum design and delivery, development of trainers, career pathways, education of organisational

leadership, quality assurance of learning and creating greater agility in the regulatory environment. There is no one silver bullet and past legacies that are not addressed may be enough to paralyse potential improvements. In the , we have created a number of scenarios that put, as the focus for action, a key recommendation or intent to help readers think through the issues of following single courses of action versus more integrated ones. A key recommendation is therefore to use these scenarios with stakeholder groups to explore and develop policy and actions.

Recommendations

Recommendations are available separately. For further information please contact Dr Helen Bound helen_bound@ial.edu.sg

Thinking through scenarios

While the recommendations provide some tangible actions to consider, we would recommend that these be first explored through a process of scenario testing. This is a method that has been successfully employed in other contexts when multiple stakeholders with responsibility for different aspects of the system are involved. For example, in making one recommendation for a particular intent, it may set up an unwanted dynamic in other parts of the system. Through exploring a set of scenarios, a mixed stakeholder group can tease out these issues and dynamics, building a nuanced shared understanding that enables agility in execution rather than merely following a rule-based action. In the Appendix we provide some scenarios as initial examples for this process that could be further developed.

References

- Bakhtin, M. M., & Holquist, M. (1981). *The Dialogic Imagination: Four Essays* (C. Emerson & M. Holquist, Trans.): University of Texas Press.
- Beck, D. E., & Cowan, C. C. (1996). *Spiral Dynamics: Mastering Values, Leadership, and Change: Exploring the New Science of Memetics*. Malden: Blackwell Publishing.
- Belenky, M. F., Goldberger, N. R., Clinchy, B. M., & Tarule, J. M. (1986). *Women's Ways of Knowing: The Development of Self, Voice and Mind*. New York: Basic Books.
- Belenky, M. & Stanton, A. (2000). Inequality, development and connected knowing. . In J. Mezirow (Ed.), *Learning as transformation: critical perspectives on a theory in progress* (pp. 71-102). San Francisco, CA: Jossey-Bass Publishers.
- Boud, D., Keogh, R., & Walker, D. (1985). *Reflection: Turning Experience Into Learning*. London: Kogan Page.
- Bound, H. (2010). *Reflexive Practitioner Research for Professional Learning in CET*. Singapore: IAL.
- Bound, H., Rushbrook, P., & Sivalingam, M. (Forthcoming). *Developing Curriculum and Courseware Designers*. Singapore: IAL.
- Bourdieu, P. (1977). Cultural Reproduction and Social Reproduction. In J. Karabel & A. H. Halsey (Eds.), *Power and Ideology in Education* (pp. 487-511). New York: Oxford University Press.
- Bracher, M. (2006). *Radical Pedagogy: Identity, Generativity and Social Transformation*. New York: Palgrave Macmillan.
- Brookfield, S. D. (1995). *Becoming a Critically Reflective Teacher* (1st ed.). San Francisco: Jossey-Bass.
- Burton-Jones, A. (1999). *Knowledge Capitalism: Business, Work, and Learning in the New Economy*. Oxford: Oxford University Press.
- Clandinin, D. J. (2007). *Handbook of Narrative Inquiry: Mapping a Methodology*. London: Sage Publications.
- Coffield, F. (2008). *Just suppose teaching and learning became the first priority*. London: Learning and Skills Network.
- Cook, T. (2009). The purpose of mess in action research: building rigour though a messy turn. *Educational Action Research*, 17(2), 277-291.

- Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research: techniques and procedures for developing grounded theory*: Sage Publications, Inc.
- Creswell, J. W. (2005). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*: Pearson Merrill Prentice Hall.
- Dadds, M. (2009). Continuing professional development: nurturing the expert within. *Journal of In-Service Education*, 23(1), 31-38.
- Darling-Hammond, L. (2006). *Powerful teacher education: lessons from exemplary programmes*. San Francisco: Jossey-Bass.
- Davis, B., Sumara, D., & Luce-Kapler, R. (2008). *Engaging Minds: Changing Teaching in Complex Times* (2nd end). New York: Routledge.
- Dilts, R. (1990). *Changing Belief Systems With NLP*. Capitola, CA: Meta Publications.
- Doll, W. E. (1993). *A Post-Modern Perspective on Curriculum*. New York: Teachers College Press.
- Evans, K., & Bound, H. (2012). Precarious workers in Singapore: How vocational learning and identities are constructed through non-permanent work in the Singaporean labour market proposal. Singapore: IAL.
- Evans, K., Guille, D., & Harris, J. (2009). *Putting Knowledge to Work: The exemplars*. London: WLE Centre, Institute of Education, University of London.
- Giddens, A. (1984). *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley: University of California Press.
- Goffman, E. (1968). *Stigma: Notes on the Management of Spoiled Identity*. London: Penguin Books.
- Goffman, E. (1969). *The Presentation of Self in Everyday Life*. London: Allen Lane The Penguin Press.
- Goffman, E. (1972). *Relations in public: microstudies of the public order*. London: Penguin Books.
- Habermas, J. (1972). *Knowledge and Human Interests*: Beacon Press.
- Hargreaves, E. (2001). Assessment for learning in the multigrade classroom. *International Journal of Educational Development*, 21(6), 553-560.
- Henderson, J. G., & Kesson, K. R. (2004). *Curriculum wisdom: educational decisions in democratic societies*. Upper Saddle River, NJ: Merrill/Prentice Hall.
- IAL. (2009). *Map of training and adult education competencies and capabilities*.

- IAL. (2011). *CU6 Conduct a Competency-based Assessment*. Singapore: IAL.
- Janesick, V. J. (2000). The Choreography of Qualitative Research Design: Minuets, Improvisations, and Crystallization. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 209-219). Thousand Oaks, CA: Sage Publications.
- Kegan, R. (1994). *In Over Our Heads: The Mental Demands of Modern Life*. Cambridge, MA: Harvard University Press.
- Kegan, R. (2000). What forms transforms? A constructive-developmental approach to transformative learning. In J. Mezirow & Associates (Eds.), *Learning as Transformation: Critical Perspectives on a Theory in Progress*. San Francisco, CA: Jossey-Bass.
- Kegan, R., & Lahey, L. L. (2001). *How the Way We Talk Can Change the Way We Work: Seven Languages for Transformation*. San Francisco, CA: Jossey-Bass.
- Kelchtermans, G. (1996). Teacher Vulnerability: understanding its moral and political roots. *Cambridge Journal of Education*, 26(3), 307-323.
- Kemmis, S. (2009). Action research as a practice-based practice. *Educational Action Research*, 17(3), 463-474.
- Kincheloe, J. L., & McLaren, P. (2000). Rethinking critical theory and qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (Vol. 3, pp. 303-342). Thousand Oaks, CA: Sage Publications.
- Kirpal, S., Brown, A., & Dif, M. (2007). The Individualisation of Identification with Work in a European Perspective. In A. Brown, S. Kirpal & F. Rauner (Eds.), *Identities at Work* (pp. 285-313). New York: Springer.
- Korthagan, F. A. J. (2004). In search of the essence of a good teacher: Towards a more holistic approach in teacher education. *Teaching and Teacher Education*, 20(1), 77-97.
- Kuhn, D., & Dean, D., Jr. (2004). Metacognition: A Bridge between Cognitive Psychology and Educational Practice. *Theory Into Practice*, 43(4), 268-273.
- Lai, E. R. (2011). *Metacognition: A Literature Review*: Pearson.
- Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 163-188). Thousand Oaks, CA: Sage Publications.
- Little, B., & Brennan, J. (1996). *A Review of Work Based Learning in Higher Education*. Sheffield: Department for Education and Employment.

- McNiff, J., & Whitehead, J. (2009). *Doing and Writing Action Research*. Thousand Oaks, CA: Sage Publications.
- Mezirow, J. (Ed.). (2000). *Learning as transformation: critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass Publishers.
- Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis: a sourcebook of new methods*. Thousand Oaks, CA: Sage Publications.
- Moyles, J., Adams, S., & Musgrove, A. (2009). Using Reflective Dialogues as a Tool for Engaging with Challenges of Defining Effective Pedagogy. *Early Child Development and Care*, 172(5), 463-478.
- Newman, M. (1993). *The third contract: theory and practice in trade union training*. Sydney, Australia: Stewart Victor Publishing.
- Nias, J. (1989). *Primary Teachers Talking: A Study of Teaching as Work*. London: Routledge.
- Nissilä, S. P. (2006). *Dynamic Dialogue in Learning and Teaching. Towards Transformation in Vocational Teacher Education*. Unpublished Academic Dissertation, University of Tampere, Finland.
- Nissilä, S. P. (2007). *Towards Equity and Self-Discovery in Teacher Education*. Paper presented at the International Study Association on Teachers and Teaching Conference, Brock University, St. Catherine, Canada. Retrieved from http://www.isatt.org/ISATT-papers/ISATT-papers/Nissila_TowardsEquityandSelf-DiscoveryinTeacherEducation.pdf
- Owen, C., & Bound, H. (2001). *Contractor Alliances and the New World of Work*: National Centre for Vocational Education Research.
- Paris, S. G., & Winograd, P. (1990). Promoting Metacognition and Motivation of Exceptional Children. *Remedial and Special Education*, 11(6), 7-15.
- Palmer, P. J. (1998). *The courage to teach*. San Francisco: Jossey-Bass Inc
- Peschl, M. F. (2007). Triple-loop learning as foundation for profound change, individual cultivation, and radical innovation. Construction processes beyond scientific and rational knowledge. *Constructivist Foundation*, 2(2-3), 136-145.
- Pratt, D. D., Collins, J. B., & Selinger, S. J. (2001). *Development and Use of The Teaching Perspectives Inventory (TPI)*. Paper presented at the AERA 2001.
- Ragin, C. C. (1991). Introduction: The Problem of Balancing Discourse on Cases and Variables in Comparative Social Science. In C. C. Ragin (Ed.), *Issues and alternatives in comparative social research*. Leiden: E.J. Brill.

- Robertson, I. (2008). VET Teachers' Knowledge and Expertise. *International Journal of Training Research*, 6(1), 1-22.
- Rodgers, C. R., & Raider Roth, M. B. (2006). Presence in teaching. *Teachers and Teaching*, 12(3), 265-287.
- Schraw, G., Crippen, K., & Hartley, K. (2006). Promoting Self-Regulation in Science Education: Metacognition as Part of a Broader Perspective on Learning. *Research in Science Education*, 36(1), 111-139.
- Schubert, W. H. (1998). Curriculum: perspective, paradigm, and possibility. New York: Macmillan.
- Scriven, M., & Paul, R. (1987). *Critical Thinking as Defined by the National Council for Excellence in Critical Thinking*. Paper presented at the 8th Annual International Conference on Critical Thinking and Education Reform, Ronherth Park, CA.
- Senge, P. M., Scharmer, O. C., Jaworski, J., & Flowers, B. S. (2004). *Presence: Human Purpose and the Field of the Future*. Cambridge, MA: The Society for Organizational Learning.
- Shotter, J., & Billig, M. (1998). A Bakhtinian Psychology: From out of the heads of Individuals and into the Dialogues between them. In M. G. Michael Bell (Ed.), *Bakhtin and the Human Sciences: No Last Words* (pp. 13-29). London: Sage Publications.
- Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the New Reform. *Harvard Educational Review*, 57(1), 1-23.
- Slaughter, R. A. (1996). *Futures Concepts and Powerful Ideas*. Melbourne, Australia: Futures Study Centre.
- Stack, S. (2007). Integrating Science and Soul in Education: The Lived Experience of a Science Educator Bringing Holistic and Integral Perspectives to the Transformation of Science Teaching. Unpublished Dissertation, Curtin University of Technology.
- Stack, S., Beswick, K., Kenny, J., Brown, N., Bound, H., Fluck, A. & Abbott-Chapman, J. (2011). Putting Partnership at the Centre of Teachers' Professional Learning in Rural and Regional Contexts: Evidence from Case Study Projects in Tasmania. *Australian Journal of Teacher Education*, 36(12).
- Stack, S., Watson, J., Hindley, S., Samson, P., & Devlin, R. (2010). What's average. *Australian Mathematics Teacher*, 66(3), 7-16.
- Tan, P. L., & Freebody, S. (2011). Analysis of IAL trainer questionnaire data final report. Singapore: IAL.
- Taylor, K., Marienau, C., & Fiddler, M. (2000). *Developing adult learners: strategies for teachers and trainers*. San Francisco: Jossey-Bass.

- Van Zile-Tamsen, C. M. (1996). *Metacognitive self-regulation and the daily academic activities of college students*. Unpublished Doctoral Dissertation, State University of New York, Buffalo.
- Villegas-Reimers, E. (2003). *Teacher professional development: an international review of the literature*. France: UNESCO: International Institute for Educational Planning.
- Voloshinov, V. N., & Bruss, N. H. (1987). *Freudianism: a critical sketch*: Indiana University Press.
- Webster-Wright, A. (2009). Reframing professional development through understanding authentic professional learning. *Review of Educational Research*, 79(2), 702-739.
- Whitehead, J., & McNiff, J. (2006). *Action Research: Living Theory*. Thousand Oaks, CA: Sage Publications.
- Wilber, K. (2000). *Integral Psychology: Consciousness, Spirit, Psychology, Therapy*. Boston, MA: Shambhala.
- Yorks, L., & Marsick, V. J. (2000). Organisational Learning and Transformation. In J. Mezirow (Ed.), *Learning as transformation: critical perspectives on a theory in progress* (pp. 253-284). San Francisco, CA: Jossey-Bass Publishers.
- Zembylas, M. (2003). Emotions and teacher identity: A postcultural perspective. *Teachers and Teaching: Theory and Practice*, 9(3), 213-238.
- Zhang, W., & Hu, J. (2002). Chinese distance learners in the northwest areas: characteristics and obstacles. *Chinese Journal of Distance Education*, 4, 10-14.
- Zhang, W. (2008). Conceptions of lifelong learning in Confucian culture: their impact on adult learners. *International Journal of Lifelong Education*, 27(5), 551-557.

Appendix – Thinking through scenarios

We recommend that the recommendations be explored through a process of scenario testing. This is a method that has been successfully employed in other contexts when multiple stakeholders with responsibility for different aspects of the system are involved. For example, in making one recommendation for a particular intent, it may set up an unwanted dynamic in other parts of the system. Through exploring a set of scenarios, a mixed stakeholder group can tease out these issues and dynamics, building a nuanced shared understanding that enables agility in execution rather than merely following a rule-based action. In appendix 1 we provide some scenarios as initial examples for this process that could be further developed.

We have developed five imaginary scenarios set in 2019 to help foster critical thinking about the desired system, underpinning values and the outcomes that we want. The point of the scenarios is not to be “correct” forecasts, nor to have all the correct system causes and effects, but rather to help foster deeper thinking about these by juxtaposing different values and approaches. By imagining the future in the present, it invites participants to bring their intuitive selves as well as their forecasting/visionary selves. The first four scenarios use two key variables:

- Degree of regulatory environment
- Difference between a system/content/competence focus and one which values the human face of the system.

Imagine it is 2019 – what does the system now look like with these as the underlying premise?

Scenario 1 – Regulating Quality of Courses (existing system)

Intent: Ensure quality of learning

Rationale: Prior to the development of the WSQ framework, there was a wide range of CET providers of various quality. The WSQ system is seen as critical in building a culture of expectation that learning has to meet certain levels of quality.

Intervention: Require organisations to develop courseware that meets set regulations and the delivery follows the original design.

Scenario 2 – Regulating organisations and people to provide professional learning (PL)

Intent: Creating an environment to encourage CET organisational support of PL

Rationale: Valuing trainers and developers lifts the quality of learning and learning outcomes. Aim is to enable trainers to have greater longer term standing within organisations in order to contribute to continued innovation in practice.

Intervention: Providing incentives to CET organisations such as increased QA status if they meet certain PL criteria, or mandating minimum PL requirements as part of their organisational accreditation. Educating CET leaders, selling the business case of improved competitiveness and more satisfied and contributing employees.

Scenario 3 – Agile course development to achieve quality outcomes in the workplace

Intent: Ensure competent workers within changing working contexts

Rationale: Focus of quality assurance is on the outcomes of learning (workplace competence) rather than the processes of learning, enabling flexibility in the design of learning programmes, and greater agency of trainers and designers in reflexive innovative learning design.

Intervention: New quality assurance processes built around agile leadership (purposeful steering) and course development partnerships between AQ, PL, CET organisations and industry. Shift to courses as “frameworks” enabling flexible content and delivery, while workplace competence is quality assured.

Scenario 4 – Valuing people – Master trainers

Intent: Trainers are valued for their passion, contribution and leadership of innovation.

Rationale: Training has low standing/status among the professions, and the commitment, passion and desire to contribute is often unacknowledged, resulting in fatigue and apathy. This is a grassroots programme to revitalise the profession, based on the notion that trusting in the professionalism of the trainer (versus excessive regulation) will build quality learning.

Intervention: Development of “master trainer” programmes that enable trainers to develop ongoing practitioner inquiry processes that contribute innovations to their organisations, becoming ambassadors and leaders across organisations. The system that surrounds the trainer is seen to have a human face – so the development of professional networks and communities of practice is key in enabling agency within the system.

Scenario 5 – Valuing teaching and learning

Intent: Helping trainers develop their own rich, diverse paradigms of teaching and learning

Rationale: Trainers, curriculum designers (adult educators) who have a deep understanding of teaching and learning are more likely to be flexible, adaptable and responsive. This, in turn, contributes to and develops an excitement about learning in learners because their trainer recognises the learning needs, the context, the experience of the learner and draws on these to develop and grow the individual and the group. It means these adult educators become innovative practitioners and potential mentors for those new to the industry. In addition, a deep understanding of teaching and learning provides a strong foundation for the changing roles of trainers as funding, delivery, organisational needs (of their own employer and employers they work with) and markets change.

Intervention: Mandatory qualifications for the sector incorporate and model rich, diverse paradigms of teaching and learning, based on a dialogical approach. Networks of trainers share stories and use pedagogical language to make sense of different stories. Innovative practice is rewarded.

Questions:

1. For each of these scenarios, imagine what the training environment is like in 2019. What are the issues and dynamics? What are the experiences of different stakeholders in this scenario, for example, learners, workplace leaders, CET leaders, trainers, courseware designers, IAL trainers, QA people, unions and organisations?
2. How might you develop these scenarios further? Alternative decision points? What if...? Run it forward. Consider the pros and cons of different decision points. What is happening elsewhere that could throw light on possibilities as well as possible trajectories? What is likely to go wrong and require mitigation or intervention, or actions that are counter to original values or intents? What is missing? What assumptions are being brought forward from past ways of operating that could be challenged and new possibilities considered? What are the indicators for success? What is being measured? What are the core values and are they coming through?
3. Develop your own preferred scenario for 2019. What is needed to get there?

What do the scenarios look like in 2019?

The following is an imaginative response from the perspective of an IAL Researcher in 2019. How does this compare to your own imagination of what might happen in 2019 for any of the five scenarios? Where do you agree, disagree? How might different perspectives from different people in the system like these help to build a more robust plan of action for the future?

Scenario 1 – An IAL researcher in 2019 explains: The emphasis on the regulation of course content and delivery has resulted in many providers adopting an atomised approach (one standard – one module) to learning. Considerable investment in training and time goes into filling out the documentation needed for the processes. A whole group of ACTA modules are needed to train people on how to meet regulations. Further, the regulatory environment has meant that little innovation is taking place within accredited courses for fear by CET organisations of losing accreditation and status. The focus on classroom competence around content has created a gap between classroom learning and on-the-job competence. Trainers have become devalued and are just performers of specified content with little agency for change. Trainer mobility, fatigue and drop-out rate have increased. Adherence to what is “measured” has become more important than the actual quality.

While a regulatory environment was important initially in building a greater attention to developing quality, it has now paralysed the development of ongoing quality for many organisations as they continue to sustain the initial practice. Our learning from

this is recognition that regulation, when too heavily micro-managed, can be counter-productive; it becomes an end in itself rather than a means to get there.

Scenario 2 – An IAL researcher in 2019 explains: This is a climate where some businesses are excelling with the creation of vibrant learning edge organisations, building capacity of their staff and valuing them. There is increased longer term employment, staff satisfaction and renewed passion as educators. Some organisations have employed gamification ideas, for example, associating quality performance with team colour ratings (blue – high performance, green – OK, red – poor), providing PL interventions for under-performing teams.

Other organisations were disengaged, not interested in the incentives – business as usual – no improvements, just following bare minimum rules. Further, others, in order to meet the new criteria, made PL an onerous experience for their employees, employing unnecessary red tape resulting in increasing staff mobility and turn-over.

We are concerned that mandating PL reinforces a rule-following mentality for some companies. We realise that the problem is far bigger than just building capacity of trainers. It is about building the capacity of organisational leadership. We believe that the companies with already good leadership were the ones that “succeeded” under this scheme because they already recognised the value of people to their organisations. In hindsight, we realise we needed a strong interventionist strategy to build leadership of weak organisations using a variety of partnership models.

Scenario 3 – An IAL researcher in 2019 explains: In moving to a new system where quality assurance is focussed on measuring competence in the workplace (outcomes of learning) rather than the delivery of learning, we were wary of the role of regulation in setting up the same issues as in the current context, but just moved now to a different context. Thus it was important in coming up with a variety of models for organisations to work within that took into account their stability versus their need for more rapid “training” responses as they were going through development and periods of review. These latter industries required more process-oriented quality assurance based on agile leadership in course development – partnerships between QA, PL, organisations drawing on principles of purposeful steering and adaptive management.

However, the transition to the new system took considerable time and effort. We needed to have a careful transition strategy in place. It was not about deregulation of quality assurance, it was about fostering a new culture of thinking around quality assurance. We had to develop new training courses, and there were old ones that were no longer needed. Further, our train-the-trainers programmes (ACTA and DACE) needed to model new approaches by building in workplace competency components, and this led to many interesting discoveries within workplace settings. It opened up the training organisations to different types of scrutiny and different types

of conversations about learning, quality of trainers and the organisational conditions able to support this.

Scenario 4 – An IAL researcher in 2019 explains: Some trainers were attracted to the programme because it supported what they already were passionate or motivated about but had little room to express within their workplaces. As a result of the programme that linked them with networks and partnerships, they were able to create considerable traction. Their practitioner inquiries revealed further information about the system that, through the development of mixed stakeholder teams, could lead to change. We found that to make this work, we needed to provide considerable initial support in helping to build organisational support, partnership teams, community of inquiries, networks and opportunities to share with others. We realised that it was important to redefine KPIs and foster conversations about what is valued and what is important to capture and forefront, not what is easy to measure. Once established, these “master trainers” needed less support and became the master teachers and ambassadors that we hoped for, revitalising within and also beyond their organisations. A key part of this dissemination process was telling our stories, whether the success ones to inspire, or the ones that revealed the complexity of issues, to help audiences develop more nuanced understandings.

However, there were some people who were initially motivated because of the incentive of increasing status, and we became wary how some people might exploit the system for their own ends. Further, while we believe the programme has resulted in many improvements across the system, it is still patchy, with no take up in some industry areas. The regulatory environment has been one that is difficult to work within, and for those organisations that have made a leap into new paradigms of learning and competence, it has taken considerable resources and stakeholder engagement.

Scenario 5 – An IAL researcher in 2019 explains: We have seen the growth of a sector with a mix of adult educators who are highly innovative and well respected, those who are sound practitioners and those who are in the sector mainly to collect a lucrative monetary reward. The privatisation of the sector – that is education is considered to be a market – still creates barriers to innovative practice, as the commitment of time and resources is seen by some providers as being contrary to the need for profit. Good educational governance embedded in organisations with a learning culture that supports rich, diverse paradigms of teaching and learning is much more developed in the sector than some years ago, but still has some way to go to be established as a norm.

The status of trainers has improved compared to a few years ago. Employers are more aware of what to look for when partnering with providers and specific trainers. Learners use their own networks to pass on information about who the good providers and their preferred trainers are.

