Research Report

Reflective Practitioner Research for Professional Learning in CET

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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.

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Key Messages

The purpose of this research project is to identify the range of pedagogical beliefs of Workforce Skills Qualifications (WSQ trainers, trainers' enactment of those beliefs and the ways in which context mediates these beliefs. In addition, through the process of engaging practitioners (trainers) in undertaking their own research the project aims to explore how this process enables reflective practice, and to work towards developing possible models for professional learning involving practitioner research and reflective practice. This report is delivered just past the halfway mark of the research project. To date, key messages are:

- As expected, there is a range of pedagogical beliefs (beliefs about teaching and learning) amongst practitioners participating in the project. As the literature testifies, practitioners will hold multiple sets of beliefs or perspectives, but most hold a dominant perspective/belief.
- Teaching and learning strategies used by practitioners relate to the design of the curriculum to which they are training from. When contextualising curriculum, trainers rely heavily on telling their own stories as this is one way they can legitimately introduce their own material.
- We need to better understand the ways in which trainers work within their classrooms[1] the nature of the "contract" between learners and trainer. For example, are learners expected to talk and/or to listen; to answer questions and/or ask them; to problem pose and/or problem solve; to produce or reproduce knowledge (Hildebrand, 1999)?
- Curriculum design appears to be important in the extent to which learners are invited to be active meaning makers or passive recipients.
- Commonly held perceptions about rules relating to Curriculum Training and Assessment Guide (CTAG) and Quality Assurance Division (QAD) in combination with Approved Training Organisations (ATOs) implementation of these perceptions have resulted in the perception that the curriculum is immutable i.e. it cannot/should not be changed, apart from the need to contextualise. Trainers made suggestions for flexible curriculum.
- Trainers actively participate in professional learning, particularly in sessions about keeping up-to-date with industry knowledge and practice.
- Trainers seek professional learning opportunities in relation to managing learning processes and theory and practice (praxis). For example, "are learners not participating in group work actually learning?" and "how can I

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[1] Classroom settings are identified in this report as the trainers interviewed all worked in classroom settings. However, the point applied to all learning settings (e.g. online, workplace, community, etc.)

help learners to learn better?" Some considered there were limited opportunities for this kind of professional learning.

- As expected, trainers engage in reflection. To enable critical reflection, as opposed to technical reflection, there is a need for deeper pedagogical knowledge that gives trainers access to concepts and a range of perspectives and lenses through which to critique their practice.

Executive Summary

This project meets a number of purposes. Its overall intent is to develop research and reflective practice capability amongst participating trainers. In the process of meeting this intent, a number of separate research questions are asked, relating to trainers' pedagogical beliefs, the enactment of these beliefs, professional learning, and the mediation of context.

Background

Constant change requires practitioners to be responsive and flexible. Such responsiveness requires an ability to question taken-for-granted practices (Dadds, 2009; Webster-Wright, 2009). There is a need for a professional development model of practitioners that attends to the development of practitioners' understanding of learning, gives them voice, and recognises their judgment while building confidence to cultivate inner expertise (Dadds, 2009). If these, or similar principles, underpin a professional development approach for practitioners, then equipping practitioners with research tools and tools for reflective practice potentially sets up practitioners to continuously develop their own practice. For example, informed judgment is required as trainers negotiate the often competing needs of the multiple stakeholders they explicitly and tacitly are "contracted" to (Newman, 1993): their learners, providers and companies and the demands of the curriculum as determined by policymakers. Reflective practitioners, able to be attuned to their learners' needs, to pose questions about their practice and the role of mediating factors such as curriculum, national policy initiatives and other contextual factors in their day-to-day practice, are likely to be responsive agents of change.

Reflective practice is not easy. Reflection is part of experience, or arises from experience with the reflective process resulting in a restructuring of conceptual frameworks (Boud, Keogh & Walker, 1985). Access to pedagogical conceptual frameworks enables practitioners to use these frameworks as lenses through which to critique practice. One approach to engaging in reflective practice is to state one's pedagogical beliefs and values, enabling reflection on differences between rhetoric and actual practice.

There is a gap in our knowledge and understanding of continuing education trainers' pedagogical beliefs. Pedagogy is understood in this study as the underlying beliefs and assumptions embedded in a trainer's approaches, strategies and techniques. For an individual to systematically examine practice requires (i) dialogue with others; (ii) opportunities to gain feedback from multiple perspectives, such as through the four lenses of one's own autobiography of learning; and (iii) feedback from learners, peers and the literature (Brookfield, 1995). A dialogical,

inquiry-based process is intrinsically a collaborative one of meaningful interactions between trainers and their stakeholders (Villagas-Reimers, 2003).

Pedagogical beliefs are often conceptualised as ranging from teacher-centred to student-centred orientations. In a comparison of models of teaching, Kember (1997) suggests there are three major orientations in how teachers conceive of teaching. The first is teacher/content-centred. At the other end of the spectrum is the learner-centred/learning orientation. The third orientation is described by Brown, Lake and Matters (2009) as a bridging one that "involves students and teachers interacting, as teachers at times transmit knowledge and at other times involve the students in active constructive apprenticeship in the domain being taught" (p. 61). Trainers and teachers constantly move between teacher and learner-centred approaches, within a single session.

Methodology

A mixed methods approach is undertaken in this study. The work with practitioners is qualitative; however qualitative data is supported with the implementation of an online survey to all Workforce Skills Qualifications trainers. The survey seeks to identify practitioners' pedagogical beliefs, their enactment of those beliefs and the mediation of contextual factors such as curriculum. Findings from the online survey will be reported separately. This current report is based on qualitative semi-structured interviews with participating practitioners and the management staff of these participating training providers. Some of the findings from the workshops conducted, as part of guiding practitioners through the research process as they undertake their own projects have also been drawn on. These workshops will form the basis for a separate report at the end of the project about professional learning and research-initiated reflection.

The process of undertaking research provides an important means for participating trainers to develop knowledge and skills in research. In addition, the data collected leads to reflection. Of the two providers currently taking part in the project, one group of trainers has elected to study the experience of their learners in WSQ programmes while the other group is investigating "In what ways does curriculum design enable participants to apply the competencies at work?" These projects are standalone projects but sit under the umbrella of this project Reflective Practitioner Research for Professional Learning in CET.

Findings

Trainers in this study are committed practitioners who care deeply about their learners. These trainers have varied pedagogical beliefs, as would be expected. However, there appears to be a tendency towards teacher-centred approaches. There is a difference in language used and actual strategies indicative of approaches that are considered to be learner-centred, but seem to be implemented using teacher-centred approaches. We have drawn on practitioners' pedagogical beliefs and their strategies to make some assumptions about what the dominant practices are, and therefore what the nature of the "contract" is between teacher and learner. Hildebrand (1999) suggests that one way of thinking about identifying dominant practices is to ask basic questions such as: are students expected to answer questions and/or to ask them, are students expected to produce or reproduce knowledge, is there a climate of problem posing and problem solving?

The ways in which beliefs mediate the contract between practitioners and learners can be understood in a number of ways. We can explain the contract using different metaphors, label them in theoretical terms, place them along a continuum and/or understand the nature of the "contract" between practitioner and learners in terms of roles, (that is, division of labour) between practitioner and learners. A discussion of these different ways of interpreting beliefs can be found in the final chapter.

There is a sense that a number of practitioners feel restricted by the curriculum, with some commenting that they limit their teaching of WSQ because of the inflexibility of the curriculum. There are practitioners in the WSQ system who report that at times they feel restricted in meeting learner needs and the extent to which they can truly contextualise materials and content because of the perceived inflexibility of the curriculum. In response to these perceptions, more experienced, confident practitioners take a flexible approach to the curriculum to varying degrees, adjusting content, time, the order and structure of activities; all practitioners add in their own material.

There is clear evidence that practitioners involved in this project are strongly motivated to participate in professional learning and development opportunities. Trainers are keen to learn more about keeping their industry knowledge up-to-date, managing pedagogical processes, and understanding pedagogical theory as it relates to practice. There is strong evidence that these trainers actively seek out professional development and learning activities, particularly those arranged by the provider where most training is undertaken or they are employed with.

There appears to be something of a divide at times between full-time and adjunct staff, expressing itself as a "them" and "us" culture. This arises from the nature of employment, subsequent employment opportunities and a potential unwillingness to share as a result. This culture limits possibilities for genuine exchange and

learning in communities of practice and meetings for example, not only for individual trainers but also for the provider themselves.

As would be expected, each provider has different professional development and learning opportunities for their practitioners. Both providers use observations and feedback to practitioners, however, one provider has developed this process far more extensively. This process aside, pedagogical support for practitioners appears to be somewhat random as it is based largely on access to full-time staff in their role of mentor. Access could be problematic from the perspective of time and the quality of support; full-time staff have multiple roles, including training, thereby limiting the time they have available for mentoring. Additionally, in some instances, full-time staff may not have as much experience and/or pedagogical knowledge as the adjunct. Our data showed that in quite a number of cases, the adjunct staff were more innovative and displayed deeper pedagogical knowledge than some of the full-time staff. However, there are informal communities of support amongst practitioners, and in the case of one provider, a formalised community of practice.

Conclusion

Different stakeholders have and meet different needs. Stakeholders relevant to practitioners' continuing professional development include the practitioners themselves, curriculum designers, providers, policymakers, auditors and so on. We need to map these different needs and identify overlapping needs. It is in this space of overlapping needs that there is likely to be possibilities for fruitful dialogue about the hoped-for trajectory for learners and therefore, for practitioners. In addition, we need to better understand the issues and concerns that practitioners are grappling with on a day-to-day basis in order to design a strategic professional learning approach.

The value of understanding practitioners' dominant pedagogical beliefs and their enactment is a starting point for reflective practice on the individual level. At the provider/institutional level it offers opportunities to consider intended outcomes and actual outcomes. At the policy level, it is a starting point to consider factors that enhance or constrain particular approaches.

Recommendations

- That IAL seeks to understand the match (or not) between Advanced Certificate in Training and Assessment (ACTA), as it is currently conceptualised and delivered, and trainer beliefs and enactment of those beliefs.
- Providers articulate their pedagogical beliefs. This enables consideration of professional learning activities and the development of varied approaches to the enactment of these beliefs.

- Policymakers identify what policies, and the ways in which these policies are enacted, encourage or inhibit particular approaches and beliefs.
- A representative sample of learner and trainer guides are analysed for the assumptions about teaching and learning implicit in their design. This can be undertaken by analysing, for example, cognitive levels at which guides require of learners, levels of engagement required of learners, and the intent of each learning activity.
- Stakeholders explore ways in which they can develop curriculum as a flexible document, not as a stipulated requirement. This will require close engagement with providers.

Further investigation is undertaken into identifying the overlapping needs of the different stakeholders and to more fully document the day-to-day issues and concerns of practitioners. This is a first step in strategically designing continuous professional learning for practitioners.

Introduction

Rationale for the project

This project meets a number of purposes. Its overall intent is to develop research and reflective practice capability amongst participating trainers. In the process of meeting this intent a number of separate research questions are asked, relating to trainer pedagogical beliefs, the enactment of these beliefs, professional learning, and the mediation of context. The rationale for selecting these questions is set out in the following paragraphs.

The Workforce Development Agency's (WDA's) commitment to professionalising the Continuing Education and Training (CET) sector assumes a need for continuing professional development for its trainers, herein called practitioners. A major purpose for such continuing professional development is the need for practitioners to be able to respond, and take initiatives to continuing demands for growing skills, developing the Professionals, Managers, Executives, and Technicians (PMET) workforce's generic skills, plus innovation and creativity (Economic Strategies Committee 2010).

This agenda requires practitioners to be able to handle change, and be responsive and flexible. Such responsiveness requires an ability to question taken-for-granted practices (Dadds, 2009; Webster-Wright, 2009) through developing reflective practices leading to the examination of taken-for-granted assumptions (Brookfield, 1995), and the construction of knowledge of oneself and one's practices. There is a need for a professional development model of practitioners that attends to the development of practitioners' understanding of learning, gives them voice, and recognises their judgment while building confidence to cultivate inner expertise (Dadds, 2009). If these or similar principles underpin a professional development approach for practitioners, then equipping them with research tools and tools for reflective practice potentially sets up practitioners to continuously develop their own practice.

Salvo and Lupou (2009) note that in Europe, there has been "little attention paid to… the further professionalising of staff working in adult learning" (p. 2227). In Singapore, the process of professionalising the industry is quite recent, beginning with an expectation that trainers have the Advanced Certificate in Training and Assessment (ACTA). This project seeks to contribute to the professionalisation of CET practitioners, through involving participants in the undertaking of research and reflection, and at the end of the project, to propose possible models for professional development of CET practitioners that involve research and reflection.

Purpose of this report

This project draws together two strands of the Institute for Adult Learning (IAL) Research Strategy (Brown & Tan, 2009): "research capacity building" (p. 19) and the research theme of learning that is part of "advance[ing] the professionalism and effectiveness of the CET system" (p. 18). The purpose of this project is to extend trainers' understanding of the processes of learning and teaching, and provide participating practitioners with knowledge of research investigative strategies and approaches. In addition, tools for critical reflective practices that have the potential to become part of their everyday practice, are introduced to participants. An online survey to the known population of WSQ trainers was also administered to contribute to research Questions 1, 2 and 3. Findings from the survey will be made available separately as the survey is being analysed at the time of writing.

The research questions this project addresses are:

- What are the pedagogical beliefs of Singaporean WSQ trainers?
- How do trainers enact their pedagogical beliefs?
- In what ways does context mediate practitioners' pedagogical beliefs and enactment?
- To what extent does undertaking of practitioner research enable trainers to develop reflective practice?
- What would constitute a model of professional learning based on practitioner research and reflection?

The purpose of this first report is to:

- Provide the context and literature that informs the study;
- Inform stakeholders of the design, process and timeframes of the study; and
- Provide an analysis of findings to date.

Findings in this report are based on interviews and workshops with trainers (n=19) and management (n=4) from the two participating training providers. Details of the participants and selection criteria can be found in the Methodology section.

The rest of this section explains the key terms used in the research questions, namely pedagogical beliefs, professional learning, and context. Anecdotal evidence suggests that many Singaporean trainers have some familiarity with quantitative approaches to research, but not qualitative approaches. Therefore, it is worth noting some of the salient features of qualitative research as this report addresses qualitative findings to date.

Approaches to Research

For most of the 20th century, quantitative research, based on the scientific method, dominated educational inquiry (Creswell, 2005), with surveys and experimental research from psychology dominating the field. However, naturalistic inquiry, where the research takes place in real settings is a characteristic of qualitative research. Qualitative researchers "seek answers to questions that stress how social experience is created and given meaning" (Denzin & Lincoln, 2008, p. 8). The qualitative researcher is interested in the lived experience of the participant, seeking to understand "why" and "how". Rather than experimental designs with pre- and post-tests and working with numbers, qualitative researchers work with text. Quantitative research provides us with answers to the "what" questions. Increasingly, both approaches are used in mixed methods studies, as each approach addresses different types of research questions. Data gathering in quantitative approaches identify and analyse variables, converting variables to numbers, which are analysed statistically. Data gathering in qualitative research includes (but is not limited to) interviews, focus groups, observations, and collection and analyses of documents (these could be organisational policy documents, student assessment items, journals and so on) and pictures (drawings, photos, diagrams, organisational charts, etc.). As the qualitative researcher is interested in the "why" and "how", they use open questions. A common form of interview technique used by qualitative researchers, the semi-structured interview, begins by asking broad general contextual questions (e.g. tell me about your role) to increasingly specific questions that gain examples and details.

The process of data collection and exposure to multiple perspectives exposes the qualitative researcher to new experiences and in the process, to a "messy area" (Cook, 2009). In this "messy area", long-held views can be disrupted, seen for the first time perhaps through what is reflected back to the researcher in the data they have collected and analysed. Consequently, learning, knowing, and changing takes place (ibid) and in the process participants can be vulnerable (Moyles, 2009), uncomfortable, and uncertain. Cook (2009), for example, found through working with early childhood educators on issues of inclusion that some participants felt they floundered, unable to fit multiple ideas and perspectives into known frameworks. Participants felt they were "in limbo" and did not like this at the time, but many valued it later when they had made sense of the whole. There is a need for participants to be supported through this process. The research process used in this study when working with practitioners is a collaborative one, aimed to develop a community of practice. The process needs to draw on both facilitators of practitioner research, and researcher participants' knowledge, beliefs, and considerations to share in the development of thinking (Cook, 2009). It is important for the facilitator to help members listen to each other, debate and reflect, and not to give the (or an) answer.

Different forms of data require different ways of evaluating the rigor of the research but the principles remain the same: what is required for good research is rigor, awareness of sample and its influence on the research, verification of data, and sound interpretation. The question(s) one investigates always guide the selection of methodology. The way in which questions are phrased is a reflection of one's own beliefs about knowledge, and philosophical beliefs. These guide the choice of methodology, be it within the range of possible approaches in quantitative or qualitative research. An outcome of the evolution of our understanding of research is the value of multiple approaches.

In this project, as explained in more detail in the Methodology section, a mixed methods approach has been taken. The quantitative data is collected through administration of an online questionnaire to all WSQ trainers. The qualitative data is gathered through interviews of trainers and their managers, observations in the workshop sessions ran regularly with participating trainers, and the trainers' own research projects.

Pedagogical beliefs

While there are a many studies exploring the pedagogical beliefs of school teachers (e.g. Fives, 2003; Chan & Elliot, 2004; Browne, Kelly & Sargent, 2008), the pedagogical beliefs of continuing education/vocational education trainers are unknown. The closing of the gap in our understanding of trainer's pedagogical knowledge can contribute to the professionalisation of this dedicated group of professionals. Knowledge of trainers' pedagogical beliefs can also contribute to planning for continuing professional learning in the sector. In Singapore, the term "pedagogy" appears to be strongly associated with teaching in schools and a strongly didactic, instrumental approach. However, in this project, pedagogy is understood as more than the transmission of content (sometimes understood as instructional methods). A teacher's or trainer's pedagogy is here defined as the beliefs and assumptions deeply embedded in the strategies and approaches used by practitioners.

Reflection

Professionals typically reflect on the work they have done and are doing. As the literature testifies (see Literature review section), much of this reflection is about how well the job/task has been done and what could be improved. While this is an important aspect of reflection, it generally results in minor adjustments and improvements. Reflection that provides opportunities to identify long held beliefs, and question the assumptions underpinning these beliefs provides the potential for deeper, long lasting changes in practice and ways of thinking about practice. The process of gathering a range of evidence from multiple stakeholders to understand different perspectives and the use of reflective tools can enable practitioners to

move into a reflective space. This type of reflection requires support and dialogue from peers. For this reason, the research projects by practitioners are undertaken collaboratively, allowing for a sharing of the workload, the exchange of ideas and questions, questioning, and mutual support.

Professional learning

In this project, the term professional learning is used, rather than professional development. Professional development can be suggestive of a deficit model, where things are done to the professional who is lacking in aspects of their expertise (Webster-Wright, 2009). Professional learning on the other hand, implies that which the practitioner has control over and which is contributed to by interaction with others. 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). The literature on professional development generally considers context and learning as separate (ibid.), whereas in this project they are considered as inter-connected and inter-related. Professional learning should be authentic, combining opportunities for investigative research and reflection, as in this project, and providing for highly authentic professional learning experiences.

Context

Context in this project is understood as a combination of the situated or immediate context (e.g. culture and structure of a provider) of the subject (e.g. a trainer) and the broader social, political and economic context (such as policy, funding and policy discourses, etc.). Other aspects of context include professional and competency-based training, WSQ discourses, institutional arrangements (i.e. connections and relationships between government, providers and industry), historical precedent and mode of employment (Bound, 2007).

Structure of this report

The report has five sections, with this being the first. The following section reviews the literature on the key terms in the research questions: pedagogical beliefs, reflective practice and processes, professional development and context. The third section sets out the methodology used for this project, explaining the sample, the participants, data collection and analysis processes. The fourth section presents the findings, which have been kept close to the data and is descriptive in nature. The final section interprets the findings and makes a number of recommendations. The recommendations are also listed separately at the end.

Literature Review

Introduction

The purpose of this review of literature is to explore and analyse what is already known about the key concepts in the research questions for this project.

The literature reviewed is not exhaustive, rather it is focused on the following key concepts in the research questions:

- Reflective practice and processes/critical thinking;
- Pedagogical beliefs of trainers;
- Professional development/professional learning; and
- Influence of context.

The body of literature on reflection, which is an integral part of practitioner research, includes types and levels of reflection as well as reference to critical thinking and metacognition. Practitioners' pedagogical beliefs inform their interpretation of curriculum documents, the learning activities practitioners use and design, and their relationship with their learners. The literature on pedagogical beliefs includes both qualitative and quantitative studies. Pedagogical beliefs are conceived as falling along the teacher-centred, learner-centred continuum; it is also noted that this continuum is not one-dimensional, but multi-dimensional. Professional development or, depending on the discourses you are drawing on, professional learning, are an outcome of practice, reflective processes, participation in any number of types of formal professional development sessions, and of course, practitioner research.

Practitioners' day-to-day practice is mediated by the situated context that is part of their everyday experience and by the more encompassing socio-political context. Situated context refers to the immediate environment in which the practitioner is operating. This includes organisational structures and cultures, the physical environment, the particular group of learners and so on. Socio-political context includes institutional practices and processes such as WDA's Quality Assurance processes, the curriculum developed within or external to the organisation, dominant political discourses around for example productivity, "skilled workforce" and professional discourses around adult learning and training.

Reflective practice and processes

Much of the literature on reflection (see for example Dewey 1933; Mezirow, 1981; Schön, 1983; Boud, Keogh & Walker, 1985; Brookfield 1995; York & Marsick, 2000) suggest reflection is part of a learning process involving not just cognition, but emotions, in that the reflective process is prompted when the practitioner

experiences difference or an unusual situation resulting in uncertainty. Reflection is part of experience, or arises from experience with the reflective process resulting in a restructuring of conceptual frameworks (Boud, Keogh & Walker, 1985). In a number of these models, there is reference to levels of reflection, such as technical reflection (seeking to know when the job has been done and how well it has been done), practical reflection (choices we make about the criteria we use to judge our actions) and theoretical reflection (deep thought, speculation on what we "think" we know). Mezirow (1981) conceives of seven different levels of reflecting on experience, suggesting the "highest" level of reflection is reflection on why one set of perspectives is more or less adequate to explain personal experiences. He calls this theoretical reflectivity, similar to Brookfield's critical reflection (1995). York and Marsick (2000) refer to the process of moving through the levels as moving from in-formation to trans-formation, suggesting that much reflection is at the "lower" levels of reflection, rather than being transformative. Brookfield's critical reflection is a type of reflection that could be placed towards this "higher"/"deeper" end of reflective thinking. There is evidence to indicate there are difficulties in engaging in the deeper levels of reflection such as critical reflection. Hatton and Smith (1994), for example, suggest that most pre-service teacher education students do not demonstrate critical reflection, but technical and practical reflection.

Much of the literature suggests reflection is an individual cognitive process (see for example Boud, Keogh & Walker, 1985; Mezirow, 1981; Schön 1983). However, what we reflect on, and any action that follows, is situated in a social context. Jolly (1999) claims that reflexivity is a way of relating to the world and a basis for understanding and responding to experience. However, reflexivity is more than an individual relating to the world; our reflective activity and following actions are informed by the tools we use and have access to, by the discourses that surround us and which are often not visible to us, by the power relations embedded these discourses and in working relations. Kemmis' claim that reflection is a political act that is shaped by and shapes ideology (1995) is an expression of the ways in which the context and actions we reflect on are not only influenced by the relations embedded in that context, but also that practitioners can influence that context.

If we understand reflection as a social process that also involves individual cognition, then reflection is also a collaborative and dialogical process. Moyles (2009), in an action research study involving early childhood educators (n=27), used reflective dialogue with the intent that practitioners engage in constructively critical discourse. She found that the collaborative process surfaced practitioners' personal knowledge and professional theories, highlighted the assumptions they made and helped participants to critique their own thinking and practice. These processes and outcomes were achieved by employing the use of video-stimulated reflective dialogue.

Tools for stimulating and achieving reflection, and in particular reflective dialogue, are discussed in the following section.

Tools used for the development of reflective practice

To understand tools that may be effective for reflective practice requires us to understand the assumptions behind the processes of reflexivity. The models discussed above make reference to recalling practice, of awareness of behaviours and thoughts, of assessing, evaluating and critical insight. Others such as Harrison, Lawson and Wortley (2005) suggest that critical thinking is a core ability for reflexivity. They claim that associated abilities include:

> *identifying a problem and its associated assumptions; clarifying and focusing the problem; analysing, understanding and making inferences, inductive and deductive logic, as well as judging the validity and reliability of the assumptions, sources of information. (p. 4)*

While these processes may resonate with a number of the models discussed above (e.g. Boud, Keogh & Walker, 1985; and aspects of Mezirow, 1981) the assumption is that the process is a linear one, taking place within the individual through a process of moving from the descriptive to analytical to evaluation. However, the extent to which we commence with lower-level thinking and move consistently in the direction of higher-order thinking is questionable. An example of the assumption that our processes are linear is embedded within Kolb's learning cycle (1984). Neat learning stages do not equate to most people's reality (Forrest, 2004), nor do we necessarily move from one process (experience, reflecting, concluding/conceptualising and planning for the next iteration) to another in a particular order. Forrest (2004) claims that a number of processes can occur at once and stages can be jumped or missed out completely. She also points out that Kolb's inventory has been used mainly with Westerners and does not account for cultural differences. Interestingly, Dewey (1933) rejected linear models of thinking. Intuition, emotion and imagination are anything linear.

The idea of levels of reflection can also be indicative of linearity, as there is an assumption that we move through the levels from the lower to higher levels of reflection. However, if critical reflection and the new understandings gained from this reflection are to be applied, it could be argued that this requires a move to practical and technical reflection, moving iteratively between the levels. Perhaps rather than levels of reflection, it may be more helpful to conceive the processes of reflection as taking place in a reflective space. In this reflective space we use any number of cognitive, emotional and kinaesthetic processes in no particular order. The concept of a reflective space sets up possibilities for conceiving reflexivity as a social activity, requiring dialogue with self and others that is mediated by the conceptual and physical tools we "know" within the working relations to which the participants belong.

Good dialogue requires bringing a "state of being" to the process of dialogue and inquiry (Stack, 2007). Stack (2007) defines that "state of being" as "a state of tentativeness, a state of willingness to look deeply, to be open to surprise, to nurture those who are tentative" (p. 328), and involves an engagement in "insight making" (p. 330). Stack developed a model she referred to as "aspects of scientific inquiry" which included analysing theorising, imagining, reflecting, relating, experiencing, completing and applying. Teaching 16- to 18-year-olds physics, Stack (2007) found that learners often entered the inquiry process through a particular aspect; the challenge was to encourage movement across multiple aspects of the inquiry process and not remain at the starting point. The value of her model is that it does not assume a linear process; rather the claim is that reflecting is one of multiple aspects through which we gain insight and involves a "state of being". This latter point supports the claim that reflection involves feelings and emotions noted in the work of Dewey (1933), Schön (1983), and Boud, Keogh & Walker (1985).

If we accept that reflection does require a "state of being" where we are open to possibilities, open to connections and prepared to question and share our emerging understandings with others as part of the process, clearly the reflective process requires dialogue. Taking this a step further, reflection appears to be a process of inquiry, its purpose being to seek to improve our practice. What does the inquiry process involve? Brookfield's four lenses (1995) suggest we need multiple perspectives to gain new understandings, to uncover long held assumptions and beliefs. The inquiry process is prompted by a sense of uncertainty (Dewey, 1933), and/or trying to make sense of a situation (Schön, 1983). Inside the space of reflective activity are actions such as the recalling of experience, attending to or connecting with feelings and re-examining the experience drawing on existing knowledge, informed by the intent of the process (Boud, Keogh & Walker, 1985). Boud et al. suggest that the intent or purpose of the reflective activity is important. Intent will certainly influence the trajectory of the reflective activity. Stack's aspects of scientific inquiry (2007) and Harrison, Lawson and Wortley's (2005) suggestion that reflection involves problem solving, inference, analysis and so on, suggest there are other tools that can be utilised within a reflective, dialogical space.

In a study exploring how to encourage mature-age adult and vocational educators in an online environment to feel comfortable with and work with "difference" and critique, Bound (forthcoming) adapted the work of Stack (2007) to the Map of Dialogic Inquiry. The Map of Dialogic inquiry (see Figure 1) is so called because it represents a valuing of dialogue and multiple perspectives to create meaning. Dialogue requires a "space" in which we make meaning (see Bakhtin, 1986). As with Stack's model (2007), Bound suggests that we enter at one or more aspects of the Map and that insights are gained through moving across and through as many different aspects as possible. Bound found that learners needed to ask their peers about their experience of using the Map in order to deepen their understanding of it.

A combination of using multiple aspects of inquiry and gathering different perspectives through the tools suggested by Brookfield (the four lenses) provides helpful tools for reflective activity.

When used in conjunction with engagement in the research process where there is a systematic gathering of evidence, there is potential for a powerful process of reflective practitioner research. Teachers change their practice when they control the question, find their own answers and see the direct impact on improving learning in their classrooms (Wideman, Delong, Morgan & Hallett, 2003). Knowledge is not owned by academic researchers, but by the practitioner researchers. The dialogical interaction between practitioner researchers, their research and the researched, makes for key prompts for developing reflective practice.

Figure 1. Map of Inquiry

THEORISING
Wanting to know reasons behind things
Using or developing models to explain why
Seeking to understand or determine principles
Seeking coherency

ANALYSING
Logical: using analytic techniques
Seeking: patterns, similarities / differences advantages / disadvantages
Offering critique
Deconstructing
Interpreting

IMAGINING
Speculative
Taking risks
Breaking rules
Creative/designing
Playing with ideas
Looking for alternatives
Exploring new possibilities
Imagining other perspectives or scenarios

APPLYING
Putting into practice
Asking "what I would do?"
Planning & strategic
Acting ethically, projecting implications / outcomes
Learning what is relevant for now and needing context

INSIGHT, MAKING CONNECTIONS, SYNTHESIS INTO NEW WHOLES, INTEGRATION

REFLECTING
Reflecting on what, how & why I do/ think/ learn/ be/ grow
Big picture & systems thinking
Including other ways of knowing
Seeking to reveal & relate to values, paradigms & cultures
Using meta-cognitive processes

PROCEDURAL
Focusing on details
Following procedure
Working with clear rules
Ordering & categorising
Defining terminology
Focusing on accuracy & precision

EXPERIENCING
Observing / Perceiving
Doing / making
Being concrete
Kinaesthetic / sensual
Seeking authentic / real experiences

RELATING
Using intuition / empathy
Seeking personal meaning
Sharing own experiences
Building relationships & meaning with others
Expressing feelings, opinions & values

One of the strengths of a tool such as the Map, when used with others in a collaborative process, is that in the process of using it, metacognitive processes become more explicit. Hatton and Smith (1994) in a study of third year pre-service teacher education students who were completing tasks in their practicum designed to develop reflective capability, found that metacognitive skills are required for reflective practice. These authors used mind mapping as one tool to aid this process. There is no one way in which we engage in reflective practice; rather, we employ a range of tools, perspectives (e.g. Brookfield's four lenses of learning, autobiography, learners, peers and literature), theoretical perspectives and tools particularly when we are engaging in critical reflective activity.

A focus of reflective practice for trainers is their pedagogical beliefs, the naming of these beliefs and the exploration of the assumptions underpinning these beliefs. Pedagogical beliefs are discussed in the following section.

Pedagogical beliefs of trainers

As stated in the introduction, there is a gap in our knowledge and understanding of continuing education trainers' pedagogical beliefs. Unlike the online definitions of pedagogy as "instructional methods" (dictionary.com) which imply a content-driven, transmission approach, pedagogy is understood in this study as the underlying beliefs and assumptions embedded in a trainer's approaches, strategies and techniques. This is consistent with a discussion of the need for trainers to be reflective practitioners, able to be attuned to their learners' needs, to pose questions about their practice and the role of mediating factors such as curriculum, national policy initiatives and other contextual factors in their day-to-day practice.

Pedagogical beliefs are often conceptualised as ranging from teacher-centred to student-centred orientations. In a comparison of models of teaching, Kember (1997) suggests there are three major orientations in how teachers conceive of teaching. The first is teacher/content-centred and at the other end of the spectrum is the learner-centred/learning orientation. The third orientation is described by Brown, Lake and Matters (2009) as a bridging one that "involves students and teachers interacting, as teachers at times transmit knowledge and at other times involve the students in active constructive apprenticeship in the domain being taught" (p. 61). In reality, trainers and teachers constantly move between teacher and learner-centred approaches, often many times within a single session. Using a quantitative instrument, the Approaches to Teaching Inventory developed by Prosser and Trigwell (1993), Coffey and Gibbs (2002) found that teachers who adopted a student-centred orientation utilised a wider variety of teaching methods than teachers who had a teacher-centred orientation. It would seem that a trainer's or teacher's orientation is likely to influence where most time is spent along the teacher-centred/learner-centred spectrum. A teacher's dominant orientation is reflective of their pedagogical beliefs and assumptions about teaching and learning.

For example, a teacher who spends a lot of time "imparting knowledge" is likely to adopt a "banking" (Friere, 1993) to learning, assuming that they are the "expert" and their learners are the depositories into which knowledge is fed or "banked". Such an approach also makes assumptions about the nature of knowledge, namely, that knowledge is static. It is not dynamic and is constantly changing over time, contexts and through different perspectives.

Another conceptualisation of teacher-centred orientations is of expert transmitting knowledge to novices (Harden & Crosby, 2000). O'Neil and McMahon (2005) describe teacher-centred approaches as consisting of a low level of student choice: the student is passive and power is primarily with the teacher. This approach is often the approach taken when teachers are preparing learners for examinations (McParland, Noble & Livingston, 2004). Typically, the learner-centred/learning orientation relates to a constructivist belief that we make our own meaning. Therefore the student is active and engaged, not passive, the student is embarked on a journey of discovery, and along the journey the tools for independent learning are learnt. Social constructivist perspectives believe learning requires interaction with others; they emphasise activity and learning with others. Socio-cultural perspectives add to this by noting that the tools we use and have access to, as well as the context in which we live, work and learn, mediate learning. O'Neil and McMahon (2005) describe the learner-centred/learning orientation as one where there is a high level of student choice, the student is active and power lies primarily with the student. A learner-centred orientation can be inclusive of a number of theoretical perspectives viz. constructivism and socio-cultural perspectives. Within each of these perspectives, there are multiple understandings of learning.

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 they train and have 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/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. However, it is not necessary to use predominantly teacher-centred approaches for learners to do well in examinations. In a study of two cohorts of students in a change from traditional (n=188) to problem-based learning (PBL) (n=191) methods in a psychiatry attachment, McParland et al. (2004) found that the PBL curriculum resulted in significantly better examination performance than did the traditional teaching curriculum.

O'Neil & McMahon (2005) note that student beliefs and orientations to learning are another factor in the complex interactions that mediate a teacher's orientation.

Student-centred learning approaches may not be well accepted by the students themselves.

> *Students who value or have experienced more teacher-focused approaches, may reject the student-centred approach as frightening or indeed not within their remit. Prosser and Trigwell's work in higher education emphasises the different belief systems held by staff and students (2002). They found that lecturers with a teacher-centred approach to teaching held views that students should accommodate information rather than developing and changing their conceptions and understanding. The reverse was true for those with more student-centred approaches to their teaching. Perry's work on the development of University students highlights how students move from a dualistic view that knowledge is right or wrong to a relativist view that all answers are equally valid (Perry, 1970). This study highlights that even during the University years, students can change their view on learning and as they move through the years so may their views on student-centred learning change. In support of Perry's work, Stevenson and Sander (2002) highlighted that first year medical students were suspicious of the value of student-centred learning methods.*

Learners' expectations about what learning is are embedded in the physical infrastructure in which learning takes place, in their previous experiences that have been labelled as learning, and in the language used to describe these experiences and discourses behind the language. For example, rows of desks facing the front where the teacher "performs" are indicative of learning as passive: the role of teacher is to "give" knowledge and the role of the student (as opposed to learner) is to take in that "knowledge" and repeat it. An experience of formal education consisting of learning for high stakes examinations reinforces the idea that "learning" is passively taking in knowledge and regurgitating it. "The high level of consistency in the pedagogical practices used by teachers has created a sense of what is 'normal' " (Hildebrand, 1999).

Pedagogical beliefs are complex and multi-faceted. In simple terms, we can conceive of pedagogical beliefs as lying along a continuum between teacher-centred and learner-centred. Each end of the spectrum has a number of theoretical perspectives. In addition, trainers and teachers move along the continuum depending on a number of factors including: subject matter, curriculum (see Schulman, 1987), the learners (O'Neil and McMahon, 2005), trainers' own autobiographies as learners (Brookfield, 1995) and dominant pedagogical practices (Hildebrand, 1999) in the field and/or context in which training takes place. This conceptualisation suggests the continuum is not one dimensional, but multi-dimensional.

Measuring pedagogical beliefs

A number of tools have been used to measure school teachers' and pre-service teachers' pedagogical beliefs. These include the Teaching Perspectives Inventory (TPI) (Pratt, 1992; Pratt & Associates, 1998; Pratt & Collins, 2000), and the Teaching and Learning Conceptions Questionnaire (TLCQ) (Chan & Elliot, 2004).

The TPI is a 45-item questionnaire that gives numerical scores on five different perspectives. It has been used by more than 5000 people including pre-service school teachers, students, those teaching in higher education and a variety of professionals who "teach" as part of their role, such as adult educators, dieticians, English as second language teachers, civil service trainers and nursing and fitness instructors. The questionnaire has three sections: actions (what teachers do when teaching); intentions (what teachers try to accomplish in their teaching); and beliefs (what teachers believe about teaching). The five perspectives are transmission, developmental, apprenticeship, nurturing and social reform. Pratt, Collins and Selinger (2001) describe the five perspectives in the following way.

Transmission, the most teacher-centred perspective and is described as good teaching, requires mastery over the subject matter. It is the teacher's responsibility to represent the content accurately and efficiently and to organise it in its legitimate, authorised forms, to clarify misunderstandings, answer questions and provide summaries of what has been presented. Teachers provide clear objectives, set the pace and convey content enthusiastically and efficiently.

Apprenticeship is a belief that effective teaching is a process of enculturating students into set of social norms and ways of working. Good teachers are recognised for their expertise. It is their role to translate performance into accessible language and sets of tasks. Learning generally proceeds from simple to complex, allowing for different points of entry. Good teachers know their students, particularly what they can do with and without guidance. As learners become more competent, the teacher's role changes, offering less direction and increasingly giving responsibility to the learner.

Developmental perspective believes that effective teaching must be planned and conducted from the learner's point of view. This requires teachers to know their learners and understand how they think and reason about the content. The intent of teaching is to help learners develop complex cognitive structures for understanding the content. Teachers require good questioning skills that encourage the learner to move from simple to increasingly complex forms of thinking and provide plenty of examples that are meaningful to the learner. Questions, problems, cases and examples are tools used to assist learners move towards more complex reasoning and problem solving.

Nurturing assumes that learners' efforts to learn come from the head, and the heart. Fear and failure demotivate learners. Therefore it is assumed that learners can succeed if they give it a good try and their achievement is a product of their own effort and ability. Accordingly, good teachers under this perspective provide care and support. They establish a learning climate of caring and trust, clear expectations and reasonable goals for all learners. The development of self-efficacy and self-esteem in learners is considered important. Assessment of learning therefore considers individual growth as well as the achievement itself.

Social reform posits that effective teaching seeks to challenge the status quo and consider how learners are positioned and constructed in particular discourses and practices. The intent of teaching is collective rather than individual. Effective teaching includes the analysis and deconstruction of practices and texts to identify embedded values and ideologies and to identify whom knowledge has been created by and for what purposes. Students are encouraged to take a critical stance and to give them power to take social action to improve their own lives.

Pratt et al. (2001) note that "no perspective is either good or bad, and that excellent forms of teaching can occur within each of them – as can poor teaching" (p. 2). The social reform perspective is most applicable to adult educators working in the community. However, if learning includes citizenship, then this perspective is likely to feature in a trainer's teaching perspectives inventory. While competency-based training is primarily concerned with the development of domain skills and knowledge, there are aspects of a profession or trade, which are concerned with enculturation into a profession or trade. Such enculturation includes appropriate behaviours, and as argued by CINTERFOR/ILO (2006) competency-based training does indeed address issues of citizenship.

> *Competency-based training (CBT) can be understood to mean an open and flexible process of development of occupational competencies that, based on the competencies identified, provides curriculum design, pedagogical processes, didactic materials and occupational practices and activities in order to develop in participants' capacities for them to become members of society as citizens and workers. (p. 145)*

Another tool for measuring pedagogical beliefs is the Teaching and Learning Conceptions Questionnaire (TLCQ) developed by Chan (2004) to measure conceptions about teaching and learning of Hong Kong pre-service teacher education students. Chan identified five categories related to teaching work:

- The meaning of teaching and learning;
- The role of the teacher and students;
- The role of peers – individual versus group learning;

- Students' abilities and needs; and
- The ways of teaching and class management.

The TLCQ creates a dichotomy between traditional and constructivist approaches. As such it does not recognise that teachers move constantly along the teacher/learner continuum and that there are other dimensions along this continuum. Although it is important to note that a learner-centred orientation results in learners constructing knowledge and actively making meaning that is more appropriate in a knowledge economy, there are times when an instructional approach can be required, albeit embedded within a learner-centred orientation.

Of the two instruments described above, the TPI is the one instrument that has been used outside of teacher education institutions and with adult educators, such as those teaching in universities and the community. Although it has not been used with continuing education trainers who teach in a competency-based training environment, it has been tested in a variety of contexts.

Professional development and learning

Professional development, based on developing informed understanding, judgment and giving "voice" (Dadds, 2009) to trainers, can strongly support not only the trainers (and therefore their learners) but also the Continuing Education and Training system. For example, informed judgment is required as trainers negotiate the often-competing needs of the multiple stakeholders they explicitly and tacitly are "contracted" to (Newman, 1993), their learners, training providers and companies, and the demands of the curriculum as determined by policymakers.

Professional development is often understood as participation in formal sessions such as short courses, seminars, and attendance at conferences. The emphasis is on programme and content rather than learning. Webster-Wright (2009) suggests that in the professional development literature, knowledge is considered a transferable object, a commodity, and therefore the role of professional development is to "top-up" the professional's knowledge. Such an approach implies a transmission model, valuing and legitimising particular types of knowledge and understands knowledge as separate from the knower (ibid). Dadds (2009) refers to such approaches as delivery models of professional development. In this study, a concept of professional development that delivers knowledge as a static commodity separate from trainers is inappropriate. Rather we need to look to our understandings of learning to reconceptualise such models of professional development. For the purposes of this study, learning is understood in the following ways:

- Learners (professionals) construct meaning from experiences and interactions

- Learners must be engaged. Learning is a holistic process involving the whole person; it is not just a cognitive process
- Learning is socially and culturally constructed

Learning, as socially and culturally constructed, is understood as meaning learning and is mediated by the situated and the social, economic and political contexts in which we undertake activity. Learning is mediated by the tools we use (Vygotsky, 1978); not only the physical tools we use (e.g. electronic white boards, PowerPoint presentations) but also by the mental models we use to make sense of our experiences. Learning therefore involves dialogue and inquiry (Bound, forthcoming); it takes place within a context and is mediated by the context in which learning occurs, and by our own histories and experiences. Dadds (2009, p. 37) describes

> *… 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.*

While the above description suggests professional growth is dynamic, it also suggests that it is an individual journey. Glatthorn (1995, p. 41) similarly focuses on professional growth as an individual journey:

> *Teacher development is the professional growth a teacher achieves as a result of gaining increased experience and examining his or her teaching systematically.*

However, for an individual to systematically examine practice requires dialogue with others as well as opportunities to gain feedback from multiple perspectives such as through the four lenses of one's own autobiography of learning, learners, peers and the literature (Brookfield, 1995). A dialogical, inquiry-based process is also intrinsically a collaborative one of meaningful interactions between trainers and their stakeholders (Villagas-Reimers, 2003).

An important aspect of the context of Singaporean CET trainers is that the large majority of these trainers are adjunct trainers; very few are permanent employees. Adjunct trainers are similar to contractors in that they are expected to be responsible for their own development and so need to be prepared to actively seek feedback, to be flexible, know the context in which they are working and the individuals in that context (Owen & Bound, 2001). This can require "novel problem solving and transfer across settings" (Mulcahy & James 1999, p. 21) and therefore strong metacognitive[2] strategies (Smith & Marsiske, 1997, cited in Moy, 1999).

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[2] Knowledge about managing oneself and others; insight into one's capabilities and limits

There is a requirement for reflection on experience, the capacity to abstract from those experiences to other contexts as well as the capacity to act as a result of reflection and feedback. Thus, the impetus for learning, argued by Owen and Bound (2001), is the recognition of a gap in expertise and realising the implications of not filling it. Contractors (or adjunct trainers) are more likely to obtain feedback related to job performance from specific events, rather than from the verbal or written statements typically associated with employee-related performance management and review sessions. According to Harris and Greising (1998), such feedback is also likely to be more indirect. This suggests that for contractors (such as adjunct trainers), both formal and informal opportunities for professional development are not only less than those for permanent employees, but that there is no formal structure to continuous development and growth for those working in this type of arrangement, for example, found that. There is an extensive literature that suggests that employers tend to provide less training for "contingent" workers than for their permanent full-time counterparts (e.g. Vanden Heuvel & Wooden (1999); Felstead & Ashton, 2001; Owen & Bound, 2001; Curtain, 2001). If we translate these findings to the Singaporean CET sector it suggests there are particular challenges for continuing professional development of Singaporean CET trainers.

Context, professional learning, pedagogical beliefs and reflection

"Context is perhaps the single most important influence on reflection and learning" (Boud & Walker, 1998, p. 196). What is meant by context, however, varies. Webster-Wright (2009), for example, note that professionals are socialised into ways of thinking and acting, shaping ways of being and learning, power relations and voice. This suggests that context, here, refers to professional discourses and the working relations professionals work in and with. Context is multi-dimensional, somewhat amorphous and difficult to conceptualise. As indicated in the previous sections of this review, context is embedded in our activity, the trajectories we follow, the tools we have access to and use and the relations we live and work in and with (Bound, 2007). What individuals believe and how they act is seen as shaped by historical, cultural and social conditions that are reflected in mediational tools such as language, symbols and the media (Wertsch, 1991; Wertsch, del Rio & Alvarez, 1995).

The nature of the contract trainers have with their providers, the culture and structure of the provider and the pedagogy embedded in curriculum documents are all examples of contextual factors important in this study. However, the nature of relations is more complex than the naming of specific factors. Access to professional learning opportunities is mediated by the culture of the provider (CET provider), which in turn is mediated by policy such as quality assurance requirements, the domain knowledge of the framework being delivered and the

provider's relationships with their industry and the companies within that industry. In a study of structures and cultures in Australian Registered Training Organisations (RTOs) (n=10), Clayton, Fisher, Harris, Bateman and Brown (2008) found that different cultures in small RTOs (these are more similar to Singaporean CET providers than the large public Australian RTOs) were related to different ways of doing business, leadership, and relationships and credibility with employers, amongst other factors. Relationships with employers form part of the communities of practice for trainers, providing opportunities for informal professional learning. For example, Bound and Salter (2007) found that VET trainers in the building industry were inclined to use open questions when assessing on-the-job training, but tended to use more closed questions when training in the classroom. As Webster-Wright (2009) note, workplace learning for effective continuing professional learning is of central importance for professionals.

Summary

Context is embedded in our everyday practice and informs, shapes, and is shaped by our practice. That is, we are not powerless within the contexts in which we practice; rather we can act in ways that influence our situated context. When analysing pedagogical beliefs and practices, it is important to remember that these are not standalone beliefs, but deeply impregnated with the norms and dominant discourses embedded in the tools used by trainers, such as curriculum, and the nature of the employment contract.

Engaging in critical reflective practice requires opportunities for dialogue, for gathering "data" about one's practice, and time to think. Opportunities to engage in critical reflective practice are rare when we are time-poor.

However, given the tools and opportunities for engaging in critical reflective practice, trainers have powerful tools with which to engage in their own continuous professional learning. Reflection arises from experience and in the context of this project, from the research undertaken by practitioners, making it a powerful form of workplace learning. Establishing a dialogical space for reflection in the workplace context, and enabling multiple aspects of enquiry can prompt practitioners to ask questions about their practices and the assumptions within which these practices are embedded. What is reflected on, questioned, and explored is mediated by trainers' pedagogical beliefs, and the contexts within which they are working. Pedagogical beliefs are not static; the activity of engaging in reflective practitioner research can result in the evolution of pedagogical beliefs, and therefore the evolution of practice.

Methodology

Introduction

The project is a two year mixed methods study, using a range of qualitative and quantitative methods. Two providers participated in the project. As this is a capability-developing project, there are projects nestled within the overall project; the nestled projects are those undertaken by practitioner researchers. The qualitative and quantitative aspects of the project address the research questions set out in the earlier section and are restated here:

- What are the pedagogical beliefs of Singaporean WSQ trainers?
- How do trainers enact their pedagogical beliefs?
- In what ways does context mediate practitioners' pedagogical beliefs and enactment?
- To what extent does undertaking of practitioner research enable trainers to develop reflective practice?
- What would constitute a model of professional learning based on practitioner research and reflection?

Qualitative data to address the first three research questions are strengthened through the use of quantitative data from an online questionnaire, referred to later, to all WSQ trainers.

Trainers from each participating provider identified and undertook their own research project(s), which were facilitated by the researcher. The process of undertaking research provides an important means for participating trainers to develop knowledge and skills in research. In addition, the data collected leads to reflection. At this stage, a number of reflective tools have been introduced to trainers, namely, the Map of Dialogical Inquiry (Bound, forthcoming), and Brookfield's four lenses for critical reflection (1995).

The structure of the overall project is described in Figure 2. One group of trainers has elected to study the experience of their learners in WSQ programmes; the other group is investigating, "In what ways does curriculum design enable participants to apply the competencies at work?" These projects are standalone projects, but sit under the umbrella of this project, Reflective Practitioner Research For Professional Learning in CET, as shown in Figure 2.

Figure 2. Multiple projects within one project

Questionnaire (online) for all WSQ trainers, addressing the research questions: What are the pedagogical beliefs of Singapore's WSQ trainers? How do trainer enact their pedagogical beliefs? In what ways does context mediate trainers' pedagogical beliefs enactments?

Sample

Participating training providers are that were required to commit the time of their trainers to the project. This was particularly important, as there was considerable voluntary time required on the part of the participating trainers as they undertook their research projects. The two providers involved are from different WSQ frameworks, and different sections of the service sector. For Provider 1, participating trainers were invited to take part through attending professional development sessions run by the researcher. For Provider 1, this was an evening information session. For Provider 2, some 22 trainers attended a workshop on reflective practice, and trainers from this group volunteered to participate.

Participant information

As shown in Table 1, a total of 23 interviews were conducted – practitioners (n=19) and managers (n=4). From Provider 1, 10 participants were interviewed and from Provider 2, 13 were interviewed. Overall, there are an almost equal number of full-time and adjunct participants. However, over the life of the project, participants from Provider 1 moved on and no longer worked there; other full-time staff thus participated and took their place. Participation for provider 2 was stable.

Table 1. Interviewee employment status

	Full-Time	Adjunct
Provider 1	4	6
Provider 2	8	5
Total	12	11

As expected in the training industry, overall there were more women involved than men. However, Provider 1 has more men than women participating in the project.

Table 2. Gender of participants

	Male	Female
Provider 1	6	4
Provider 2	3	10
Total	9	14

With the exception of one young trainer, participants were between 35 to 54 years of age.

Table 3. Age of participants

	25–29	35–39	40–44	45–49	50–54
Provider 1	1	0	2	4	2
Provider 2	0	4	4	3	0
Total	1	4	6	7	2

Note: Missing from this data set are the ages of three management interviewees.

Data collection

Interview data and "minutes" from workshops with practitioners are the major forms of qualitative data collected. Once a provider agrees to participate in the project, participating trainers will be interviewed Participants are asked about access to peer support, teaching strategies, stories of their teaching, how they "know their learners know", their preferred ways of learning, and their relationship with the provider. For the two providers involved to date, additional information about access to professional development and qualifications was gained through email correspondence. In addition to participating trainers, members of the management were also interviewed, two from each provider.

The interview data was analysed by the research team and the analysis of the data from each provider was work-shopped with trainers and management. A research topic and questions for the individual projects were decided upon in the first workshop. Thereafter, regular workshops were held to support the projects and provide guidance on skills required as needed. For example, interview schedules were developed in the workshops, as were sessions on interviewing technique. Trainers undertook agreed tasks between the workshops. A "wiki" was also provided for each of the projects to serve as a depository and for tracking the projects' milestones. Notes from the workshops and the wikis provide sources of data for this research.

An online questionnaire was administered to all WSQ trainers to provide quantitative data (in addition to the qualitative data) to address research questions one, two and three. The questionnaire aimed to capture Singaporean trainers' pedagogical beliefs and values, the enactment of these beliefs and values (e.g. preferred training strategies), and the mediation of contextual factors, such as curriculum, on beliefs and strategies. As this report is being finalised, the analysis of the questionnaire data is being undertaken. Details of the design, sample, and findings of the survey will be made available separately.

Data analysis

Interview data was analysed in two ways, each type of analysis serving a particular purpose. Initially, data was coded, using the following major themes (plus a number of sub-categories in each theme):

- Factors affecting learning;
- Factors facilitating learning;
- Contextual conditions; and
- Professional learning.

In the initial workshop with each provider, analysis of data under these codes and their sub-codes was used to present some early findings to participants. For this report, the coding has also been used in the analysis of sections on contextual conditions, particularly the mediation of curriculum on training, and professional development.

An additional analysis was undertaken to identify trainers' pedagogical beliefs and strategies. An excel spreadsheet was used with the following headings and completed for each trainer interviewed:

- Trainer identification code;
- Beliefs about learning;
- Trainer intent;
- Strategies;
- Terms used to describe the work they do;
- Challenges; and
- Summary (of the row).

This data was used to write the vignettes in the Findings section and for much of the interpretation that follows the vignettes. This more general and interpretative process was used, rather than relying on coding, as a means of pulling together multiple aspects of the data in the interviews that make up the complex notion of pedagogical beliefs.

Limitations of the study

This report deals with qualitative data from two providers with a total of 23 interviews made up of 19 trainers and four managers. Clearly there is limited generalisability. In addition, as the providers in the study are from the services industry, there may be different sets of issues experienced by very different industries, such as manufacturing, where for example there can be a need to meet regulatory requirements (e.g. workplace health and safety in oil and gas or engineering requirements in aviation). However, taking into account the latter point, the issues raised in this report are likely to reflect concerns of trainers and providers across Singapore. The value of a mixed methods study is that qualitative findings can be validated from a large sample. The design of the second part of the questionnaire was based on issues identified in the qualitative data.

Findings

Introduction

This section presents the findings from the research as it has been conducted to date. As a section on findings, there is some, but limited interpretation of the data. The intent is to stay close to the data as a means of providing evidence of claims made and discussed in the following final section. This fourth section is structured around the key terms in the research questions: trainer pedagogical beliefs, professional learning and development, learning, and finally, context.

Trainer pedagogical beliefs and strategies

In this section, a number of vignettes are used to summarise and present the selected trainer's pedagogical beliefs and strategies. The selection of the vignettes was relatively random by selecting every second trainer from our list of interviewees. The vignettes are based on self-reports from each trainer in the interview in relation to questions such as: "Can you give me an example of a typical session?", "What excites you most about your work?", "What frustrates you about your work?", "Do you have a favourite session or module you like to take?", "Tell me about the session.", "Do you have a least favourite session or module you like to take?", "What do you prefer to call yourself e.g. facilitator, trainer and so on?". In each vignette, each trainer is given a pseudonym. Following each vignette is a brief interpretation. Implications are discussed in the final section.

Nicholas

Nicholas has not been training long, and spoke about his training in ways that suggested he is not yet fully comfortable with his capacity as a trainer. He spoke a lot about using "show and tell", used the metaphor of trainer as "entertainer", but also gave an example of using innovative learner-centred strategies. These contradictory aspects of his trainer identity are explained with specific examples below.

Nicholas talks about "show and tell" being a focus for approaches he uses, and the need to establish his credibility with the learners, for example he states he wants to "make sure [learners know] this trainer knows a little bit about this industry" and "this trainer knows quite a bit about this trade". He also considers the "most important thing is to keep them [learners] entertained". It is this emphasis on "entertainment" that is most indicative of his lack of self-belief as a trainer or in an understanding of what an effective trainer is and does.

However, he also appears to have an intuitive capacity for working with learners. He shared a story of a situation in a class he was taking where he was teaching a

formula and one student responded that he had a far more effective process. This trainer worked with the learner over a break, and asked him to share the way he completed the same task using a different formula with the group. This was followed by a discussion about the advantages and disadvantages of each approach.

When classes commence, he deliberately seeks to find out about learners' backgrounds, builds rapport, encourages learners to share their experiences, and adjusts his strategy through "scanning", getting the "atmosphere" of the class through reading body language, and eye contact.

On the one hand, Nicholas appears to be strongly focused on the learner, and on the other, his own uncertainties appear to lead him to focus on establishing his credibility and keeping learners entertained. Establishing credibility is necessary and important. However, with experienced trainers, establishing credibility is more likely to be built into the learning design and structuring of learning; learners quickly identify trainers who have poor content knowledge and/or lack confidence in their pedagogical abilities. Nicholas was not the only trainer to use the metaphor of trainer as "actor" or "entertainer". This metaphor places the trainer at the centre, not the learner. The trainer is in control, at the front, manipulating their (passive) audience in various ways.

John

John expresses the contradiction in language and apparent intent used by a number of trainers. On the one hand he talks about "imparting knowledge", "what excites me is to be able to impart the knowledge to the people", on the other hand he states, "I would see myself as a facilitator; not so much in terms of giving knowledge and information but it's more sharing of experiences."

John actively seeks the profile of his trainees in order to be able to make the content meaningful for each group. At the beginning of a session he clarifies the objectives, goes on to use PowerPoint, sharing his stories to supplement and contextualise the PowerPoint material and he encourages learners to share their own stories. He says that if time permits, at the end of a session he asks learners, "What do you think about the story?" and asks them to write down or articulate how they would apply what they have taken from the story. When asked how he knows his learners are learning he suggests using a quiz or getting them to articulate, although this could also mean that they just regurgitate everything. One of his major challenges is, "the whole application, it is very difficult".

The use of the term "imparting knowledge" appears to be quite extensive amongst trainers and other stakeholders, suggesting the role of expert on the part of trainer and a passive role for learners, as they "soak up" the new knowledge. However, as with a number of trainers, this use of language does not necessarily reflect the

trainer's intent – remembering that intent is quite different from actions. John's intent is to share and to facilitate. However, as with other trainers, sharing of his knowledge and experience is different from working with learners' own experience and knowledge, and encouraging learners to develop knowledge, rather than acquire it for regurgitation. The classroom environment is obviously a challenge in terms of application. That application has been identified as a challenge suggests that strategies such as asking, "What do you think about the story?" in the last five minutes of a session, are not working as he would like. There is limited opportunity for learners to actively engage and make their own meaning of the content. All of which suggests a teacher-centred, rather than learner-centred approach.

Sharon

Sharon is concerned with ensuring "everything is covered" and that learners know the industry and typical scenarios. She will dramatise scenarios "for effect" and connection with learners and encourages them to share and discuss. She spoke about using classroom behaviour to point out examples of body language and pose problems, asking, "What can you do about it?" Like other trainers there is a focus on self and the experience she can bring to the classroom. "What I'm doing is to look at things from a trainer perspective what they could learn from me and my experiences and the new developments and strategies."

However similar to other trainers she tempers this with the comment that "adult training is more, 'you tell me more about yourself: I'll tell you what I know'. You ask questions, we can share, we can explore; you present, you take a look at it and to guide you perhaps in the right direction".

The following quote employs a metaphor of speaker and audience, placing herself at the centre. "When I'm at the front of the audience I'm a different person altogether; my excitement is all about sharing what I've learnt, what I've experienced, tell them some of the insights into certain developments. They may not have been privy to such insights before and I feel that I've got an advantage and I'm so proud of it; I love to share, talk about it." Connection with her learners from this sharing, she reports, is evident in "eye contact, good laughter, appreciation, fuller discussions, questions at the end of the sessions, emails, and evaluation as to what they found useful".

Sharon's use of scenarios, using classroom behaviours and body language to help make learners aware of the use of body language in practice suggests an emphasis on application and encouraging learners to think and experience the ideas she is working with. However, her language and description of her role as expert suggests learners are not in fact at the centre of her approaches. Like a number of other trainers, Sharon used an "actor" or "entertainer" metaphor which she spoke passionately about – "when I'm at the front of the audience" – this places her at the centre and her audience as passive.

Ping Ping

Ping Ping reports moving constantly along the learner-teacher continuum, preferring not to be classified under any particular label, but, "all rolled into one". She is learning and learner-focused. Keen to ensure all learners are contributing, she employs strategies such as asking learners, "What do you think? You've been keeping quiet. I need to hear from you so that I can get the whole assessment together". This suggests her gathering of evidence is perhaps more holistic than the formal assessment instruments. To facilitate full participation, she ensures learners "feel respected, feel good; arouse their interest."

Ping Ping's refusal to label herself in any one way is indicative of a high level of pedagogical content knowledge. She can "see" movement along the teacher/learner-centred continuum and has an awareness of ways of identifying and meeting learner needs, recognising that different learners, different content and different contexts require different approaches. Asking quiet participants to contribute places these learners a little out of their comfort zone, although if done in a supportive way, challenges and builds confidence in these learners. Deliberately seeking to hear from learners with the assessment in mind indicates she refuses to take a one-dimensional, blueprint approach to the formative assessment; rather, she assesses for learning as well as undertaking assessment of learning.

Jacqui

Jacqui focuses on her learners, nurturing them and at the same time seeks to challenge them; she wants to ensure no one becomes overly dependent on her in their learning journey. She wants them to stand on their own feet; "I believe in independence". She reports she uses a lot of storytelling and problem solving and "I find that I get more out of it than using PowerPoint slides". This suggests her sessions are active. She deliberately sets out to make connections between herself, the material and her learners and reports strong relations and rapport with students. She is very insistent that learners do not regurgitate what is in the learning guide; rather, she stresses to her learners that she is looking for evidence of application of theory, not a regurgitation of, for example, Maslow's five levels. She is herself a learner who prefers application – learning by doing – and this learning autobiography appears to influence her practice quite strongly.

Jacqui appears to work from an assumption that learners can and do think at higher cognitive levels. Her intent appears to be to encourage learners to actively engage, to think for themselves and work out how they can apply what they are learning. Her dislike of PowerPoint slides indicates she is very comfortable with manipulating curriculum and at the same time achieving high level (self-reported) learning outcomes and meeting the performance criteria. The removal of PowerPoint from her design, along with her emphasis on learning by doing and wanting her learners to be independent suggests her classes are active and engaging.

Alice

Alice's intent is that learners will "keep on learning and learning". She tries to "nurture them to better abilities to cope with the world, not just how to survive, but how to live a better life." While she brings in material external to the curriculum to encourage lifelong learning, she says, "in the working adult, no one is going to motivate you – you have to motivate yourself." She uses games, videos, interesting PowerPoint slides and during breaks, songs and a lot of "two-way" discussion, sharing of ideas and views. She comments that she would like to do "more facilitating" and "the most challenging is to get 100% engagement from students". Like a number of trainers, Alice referred to the importance of getting to know the learning styles of students – referring to visual, auditory and kinaesthetic (VAK) – as part of encouraging engagement.

Alice has a wider agenda for her learners than that defined by the performance criteria and curriculum documentation. Alice was quite explicit about this, as were some other trainers; in fact all trainers either implicitly or explicitly indicated their commitment to their learners and their desire to see them advance in their careers, and/or develop in other ways. Alice uses different media in deliberate ways to assist learners make connections between concepts and processes, and application. As with a number of other trainers, she refers to VAK when thinking about learning styles and the connection between learning styles and engagement.

The vignettes indicate a mixed set of beliefs and strategies used by the trainers we interviewed – as would be expected. Through their use of language such as engagement, discussion, group work and so on, we can conclude that most trainers believe learning is social and dialogical. Implicitly there is an appreciation that we make meaning of our experience – a constructivist perspective – through our engagement with others and with the materials and tools we are working with. Two vignettes told of trainers who are much more learner-centred and use a wider variety of strategies in their training. However, this was strongly tempered in a number of vignettes by the use of the "actor" metaphor, "imparting of knowledge" and the emphasis on the telling of their stories. This is suggestive of predominantly teacher-centred approaches.

As the data is self-reported, we do not truly know the ways in which trainers' structure and manage learning to enable meaning making. To what extent, for example, does the sharing of stories in one classroom versus another classroom enable learners to engage and make meaning? Or is the sharing of stories the telling of stories? What meaning do learners make of the telling of stories? A constructivist approach to learning would suggest that we need to do more than "tell"; we need to provide opportunities for engagement. Perhaps learners take more away from the telling of stories than we know? To what extent is this a cultural issue? For example, one trainer used the term "self-discovery".

In between [PowerPoint and group discussions] there are some learning activities where they have to answer individually, so some flip chart discussion, some lectures, mini-lectures, presentations to give them the background. It's mostly self-discovery; so when they start looking at the learners' guide and then try to find the answers and start reading it and discussing it, I think they get it.

This quote begs the question, what is being understood as "self-discovery" and to what extent can workbooks (learner guides) enable self-discovery? Typically workbooks require low cognitive level activity (Bound & Salter, 2007).

All trainers spoke about using their industry experience and stories; these are major tools for contextualisation. A number of trainers we interviewed placed considerable emphasis on their role as storytellers, suggestive of a lesser, more passive role for their learners. Three trainers (not in the vignettes above) overtly referred to their role as being imparters of knowledge and defined learning accordingly: "learning is acquiring new things, information, knowledge and skills". An understanding of learning as a process of acquisition and of knowledge as something to be acquired, suggests an understanding of knowledge as static, fixed, not as dynamic and constantly changing over time, in different contexts. The same trainer describes the implications of this understanding for training when she describes a good trainer as "someone who is able to get the information across, be able to translate what's in their head to the learners and the learners are able to understand". While this is an important and necessary skill for trainers to have, is the focus on content, learning, and/or learner? A contrasting perspective is expressed in the words of Alice, "I would love to have 100% involvement during classes."

A number of trainers referred to using the visual, auditory and kinaesthetic (VAK) learning style approach to assist them in encouraging learner engagement. VAK is one of many ways of appreciating the different ways in which people learn. For example, some learners prefer to begin with the "big picture", others prefer to commence with the detail and work towards the big picture. The Map of Dialogical Inquiry, discussed in the earlier section, is yet another way to help learners use different approaches. The importance of understanding different approaches is not only to help trainers, but also to help learners. If learners know and understand their preferences and the value of trying different approaches, this is another way of challenging them and to develop their learning to learn skills. To do this, trainers require an understanding of metacognitive skills and pedagogy for helping learners develop these skills.

Trainers' degree of confidence in themselves as trainers seems to correspond to their preparedness to manipulate the curriculum. Jacqui and Ping Ping appear to be strong trainers in this regard. Jacqui in particular is prepared to manipulate the curriculum with the end in view and achieve "high quality" outcomes, meaning the

quality of the work of her learners exceeds the performance criteria (remembering these are self-reported claims). She believes in her learners' ability, provides them with the structure and space and hands over responsibility for them to grow. Learners respond accordingly.

Professional learning

This section commences with an explanation of trainers' experience and their educational qualifications. This short section is followed by the findings about professional learning needs and access to professional learning. The section is divided into sub-sections on formal support and performance management, peer support and lastly, reflection.

Trainer experience and qualifications

The trainers we interviewed (n=19) ranged in the number of years they had been training, from two years, at time of interviewing, to more than 10 years (see Table 4).

Table 4. Training experience (in years)

	1–2	3–5	6–10	10+
Provider 1	1	2	2	3
Provider 2	1	5	3	2
Total	2	7	5	5

As shown in Table 5, for the most part, trainers are quite highly qualified; however a surprising number, do not have ACTA. Of the eight trainers who do not hold ACTA, one has undertaken a number of modules and another two are in the process of undertaking ACTA. Three trainers hold postgraduate qualifications, but do not hold an undergraduate degree, illustrating the varied pathways adults follow in developing their qualification profiles.

Table 5. Training qualifications of participants

	ACTA	Diploma	Degree	Post-Grad
Provider 1	8*	1	6	5
Provider 2	8**	1	8	4
Total	16	2	14	9

Notes: * 1 participant is part way through ACTA
** 2 participants are part way through ACTA

Although for the most part trainers we interviewed are highly qualified, of the qualifications trainers hold, ACTA is the only qualification that provides trainers with some pedagogical knowledge and skill. Given the expectations providers have of

their trainers, trainers would benefit from opportunities to further develop their pedagogical knowledge and skills, and gain from support to put pedagogical domain knowledge into practice. As the vignettes in the section discussing trainer pedagogical beliefs and strategies and the observations about professional learning in this section illustrate, trainers have pedagogical questions and issues they are constantly wondering about. This is an indication of committed professionals with a strong identity with the profession, requiring opportunities for exploration.

Professional learning needs and access

Table 6 sets out participation in a number of forms of professional development and professional learning, and whether or not the provider supported the activity. The professional development activities include short courses related to domain knowledge and to training, as well as seminars and workshops. Professional learning are the more informal processes including communities of practice and meetings in which issues are discussed and there is potential for learning. The figures for Table 6 were gathered by email correspondence with participants and asking them to complete a table requesting the data shown. Most, but not all participants responded, which accounts for the differences between practitioners for this table (n=18) compared to number of practitioners interviewed (n=19). To enable comparison between the two providers, raw figures have been converted into percentages and the raw figure is also shown in brackets. The use of the term supported in Table 6 refers to support provided by the provider in some form such as payment for time, or travel costs and so on.

For Provider 2 the most popular sessions are related to updating domain knowledge (91%) compared to only 64% of courses related to training. The reverse of this is true for Provider 1, where 71% attended domain knowledge sessions and 86% attended formal sessions related to training. Participants in Provider 1 are far more likely to attend sessions organised by the provider than sessions external to this provider. Participants in Provider 2 are equally likely to attend sessions offered by the provider or external to the provider.

Table 6. Professional development accessed by trainers

	Provider 1		Provider 2		Total	
	Attended n=7	Supported n=7	Attended n=11	Supported n=11	Attended n=18	Supported n=18
Short courses related to vocational (domain) knowledge	71% (5)	14% (1)	91% (10)	64% (7)	83% (15)	73% (8)
Short courses related to training	86% (6)	43% (3)	64% (7)	36% (4)	72% (13)	39% (7)
Seminars, workshops organised by Provider	86% (6)	57% (4)	82% (9)	45% (5)	83% (15)	50% (9)
Seminars, workshops external to Provider	28% (2)	14% (1)	82% (9)	64% (7)	50% (9)	44% (8)
Community of Practice sessions or equivalent	57% (4)	43% (3)	55% (6)	36% (4)	55% (10)	39% (7)
Meetings where module development, feedback, issues are discussed	57% (4)	28% (2)	82% (9)	55% (6)	72% (13)	73% (8)

Note: Numbers add to more than 18 because multiple responses were possible.

The data from Table 6 suggests that trainers actively seek to and do attend considerable professional development and learning activities. It is worth noting that of the trainers who responded to our request for data for Table 6, one trainer from Provider 1 (14%) is full-time with the remainder being adjunct trainers. For Provider 2, four (36%) out of the 11 trainers are full-time. Most responses are therefore from adjunct trainers. For both providers there is strong support of activities organised by the provider, suggesting that it is important for providers to have not only an active professional learning programme, but to develop such programmes strategically.

Issues related to professional learning from the interview data identified by trainers can be categorised into three groups:

- Keeping up to date with industry change;
- Managing pedagogical processes; and
- Understanding pedagogical theory as it relates to practice.

Keeping up to date with industry practice to ensure that what trainers deliver is current and relevant was something of concern to nearly all participants, more so amongst Provider 2. Interviewees from this provider referred to a small library the provider kept up to date and the desire for more of this type of material. Managing pedagogical processes includes a desire to learn more about, for example, managing time and content to avoid superficial learning "are learners who do not participate in group work actually learning?" or seeing other methods in use, and "how can I help [the participants] learn better?" Structuring of the learning experience is key to trainers managing and juggling curriculum, trainee needs and their learning. The third group is about access to formal opportunities to better understand pedagogical theory as it relates to practice, as indicated in the indented quote above. Managing pedagogical processes and understanding pedagogical theory as it relates to practice are interrelated and interconnected.

The following three sections explain how trainers access and make use of professional learning opportunities through formal support, peer support and self-learning strategies and reflection.

Formal support and performance management

Each of the providers participating in the study has in place a formal process for performance management. Both providers have an organised induction process for new adjunct and permanent trainers and assessors. Full time appointees observe new appointees and feedback is given. Both providers use a rating system, however the source of the rating in one instance is the evaluation forms completed by learners at the end of training (otherwise known as "happy sheets") and in the other instance the rating given is based on an observation report completed by the observer. In this latter case, the provider has developed a full handbook and

standard operating procedures for trainers and assessors. The trainer observation report covering 20 competencies organised into four sections is part of the handbook. Both providers continue to observe trainers and provide feedback, in one case twice a year (unless the "standard" of the trainer requires more feedback) and in the other case, quarterly. Both providers monitor those who fall under a certain standard.

The two providers ask trainers to provide feedback on courseware. One provider organises this through a formal validation form. The handbook indicates that such feedback is valued; management also report they value feedback; they invite trainers to provide feedback on any aspect of operations trainers consider need improvement. Apart from the formalised opportunities for feedback in the case of one provider, the official process for adjunct trainers for providing such feedback is through their assigned mentor. However, a number of adjunct trainers indicated that before going to their mentor, they seek clarification and/or input from someone they know better as once the mentor is approached, the process became formalised ("official", is the terms trainers used) rather than exploratory . In addition, adjunct trainers indicate it can be quite difficult to gain access to their mentor, as they are busy and between the different training schedules, it is difficult to find a time to meet.

Full-time trainers have access to courses, seminars and conferences. In the case of one provider, these initially include the Advanced Certificate in Training and Assessment (ACTA) and thereafter the IAL Diploma in Adult and Continuing Education (DACE), Specialist Diploma in Training Management and Quality Assurance, and Train the Trainer courses for full-time trainer assessors who have been with them for one year or more. After three years of service, these employees have access to a Bachelor of Training, Masters Degree in Lifelong Learning/Training and Development in Educational Leadership and Policy. Adjunct trainers who are performing well have access to the IAL DACE, Specialist Diploma in Training Management and Quality Assurance, train-the-trainer courses and ACTA, or ACTA CU three and five. This provider also has an ongoing community of practice, however response to this community of practice is varied, with one participant indicating the value of opportunities for sharing and another indicating that the employment arrangements and subsequent divisions between full-time and adjunct (or associate) trainers strongly limits possibilities for sharing information.

We don't really share much information because of the conflicts of interest, because schools will give classes to full-time trainers first, usually. So then it's the turn for the associate trainer. That's why associate trainers will not share much information with us; it's a very distinct two groups of people.

The second provider also has a formal system for full-time trainer assessors that is tied to regular promotion and increments. These full-time trainers have access to conferences, short courses and seminars. Each year, a learning needs analysis for individual staff is undertaken, including generic skills, managerial skills, vocational skill; staff interest, staff potential, staff aspiration and the need of the organisation. A training plan is agreed on and staff then apply for courses that "come along". Trainers however commented that there were no formal sessions for adjunct trainers, although the observations were "very helpful" and that the workshop run by this researcher was the first professional development workshop for adjunct trainers. There appears to be a discrepancy in the reports of opportunities for adjunct trainers and the actual experience of adjunct trainers to access formal professional development sessions.

A number of trainers expressed an interest in accessing opportunities to learn more about pedagogical issues, as summed up in the following quote.

> *Adjunct trainers, we are on our own, and where can I learn other than ACTA? There are very limited resources.*

One trainer made specific mention of formal sessions she attended outside of the provider involved in the study. This trainer commented that courses on how to train effectively

> *… usually go on about that same thing, which is humour. I'm more interested in some theories to explain how things can be more effective and I think theories are important; it's a good way to ground explanations "I don't know where I can find all this" I would prefer some short courses programme which is more immediate.*

However, another aspect of the reported lack of access to formal professional development is the extent to which trainers perceive opportunities such as meetings "to get suggestions for modules" and "there are regular meetings where we can share our problems" where feedback is welcomed as part of professional development. Perception is one aspect; the other is the extent of access. Full-time employees can readily attend such sessions, however, adjunct trainers may be missing opportunities to generate income by attending such sessions. One adjunct trainer commented:

> *Any activities I will just participate... cause otherwise we just conduct, okay, finished the assessment, pass that, and then a new class again, so we never have the time to sit down and think about this.*

This comment suggests that the extent to which professional learning is an implicit part of the identity of trainers is mediated by the structure and timing of their work as well as the extent to which individual agency is exercised in relation to continuous professional learning.

The extent to which adjunct and full-time trainers access peer support and have an attitude of self-development is discussed in the following section.

Peer support and self-learning strategies used by trainers

Peer support as discussed here refers to informal exchanges and guidance that occurs in and out of the workplace (i.e. at the provider). For example, one trainer mentioned there is some close friendships amongst some of the group where they talk about how they can "improve the system", the materials, assessment methods, sharing of student profiles to prepare each other for classes coming up. Another trainer from the other provider commented that, "I hardly have much opportunity to interact with my peers". The ways in which most trainers appear to have built-in opportunities for peer support are through the scheduled observations of their training.

The most commonly reported motivation for self-learning is to keep up-to-date on industry knowledge. Trainers read to do this; reading is closely followed by talking to people, using the web and trial and error, as indicated in Table 7.

Table 7. Trainers' self-learning strategies

Self-learning strategy	Trainers (n=19)
Reading	8
Talking to people	6
Accessing the web	6
Trial and error/trying out different things	4
Observation	3
Learning through my learners	2

Note: Multiple responses were possible

Trial and error is most used for trying different teaching and learning strategies which have been identified through reflection, talking with others or in some instances through reading. Talking to others appears to be important for this group of trainers to develop pedagogical knowledge. This is also evident in the regular workshops with trainers who are undertaking research as part of this project, particularly once they have started to analyse some of the data they have collected.

Reflection

The purpose of reflection is to develop and constantly improve; reflection arises from experience (Boud, Keogh & Walker, 1985). This claim is borne out in the interview data. Trainers reported they reflected to "improve myself", and "how can I

do it better next time?" For some, reflection is deeply embedded in the way they work. For example:

After every class I reflect... within my brain when I'm having my morning break or having breakfast, talking to my wife or whatever.

The positive way is that it will make you better.

I think I do it constantly; I am never satisfied, so I tend to adapt.

I always think about how can I do my class better if I give this class again. At the end or middle of the day I'll spend 5 minutes reflecting, "how was my delivery?"

For these trainers, reflection is intrinsic to the way they work; it is embedded in their practice. Overt ways of reflecting, such as reported in the quotes above, are not the experience of every trainer. One trainer commented that she reflects as part of her preparation if the "stakes are high".

I do reflect a bit [if stakes are high]. I do a bit more preparation and homework, for example, refresh my memory, this is what I'm going to say, what examples I am going to use.

In this instance, reflection is an intrinsic part of the preparation process; it is another point at which trainers reflect on previous practice. The processes trainers use to reflect bear a clear relationship to what they reflect on. Typical processes used include asking themselves, "How can I do it better next time?" "What has gone wrong?" Looking at assessment results and realising something has gone wrong, using comments from feedback sheets from learners and, "I will take note of what they did not like and I take note of what they like and I improve myself on the likes".

The latter quote is indicative of the power of the evaluation or "happy sheet" from learners. This is discussed in the following section on contextual conditions. Two trainers mentioned using journals at one stage, but found them to be "heart wrenching – just takes too much out of the person" and "it was too hard to articulate into words".

Trainers reported they reflected on the following matters: "How can I help learners learn better?" "Are learners who do not participate in group work actually learning?" And, "how do I adapt the methods and structure of content to meet and manage learners' learning styles?" Trainers asking these questions are asking deeper pedagogical questions. Typically however, trainers were concerned with technical issues; ensuring what they deliver is relevant, managing curriculum requirements and time, and ensuring they have learners' attention.

It was always too long or getting caught up in certain slides and then other slides are just passed over, and then it was managing the learners. There was this frustration about how come after this delivery they didn't learn anything?

The challenge for me is how can I conduct, impart the knowledge such that they can learn and then at the same time I can finish on time... what are the things that I can take out and what the things that I should emphasise, highlight and at the same time help them to learn?

... is there something not covered sufficiently or something that I could expand on, I should spend more time on, to make more relevant?

If a component is not reaching out to my audience I will make some changes to ensure that the next segment will capture their attention and draw them in.

These are all examples of reflection undertaken by the individual; opportunities for collective reflection were rare or took place as part of the feedback of being observed. Reflection on technical and management issues is important, and an essential element of being a professional trainer. To engage in reflection that involves a critical examination of assumptions held about teaching and learning and to use training experiences to engage in such reflection requires opportunities for supportive dialogue as discussed in the section on tools used for the development of reflective practice. Reflection involves feelings and emotions (Dewey, 1933; Schön, 1983; Boud, Keogh & Walker, 1985), which is why being in a reflective space (physical, temporal, emotional and cognitively) and being part of a supportive group, is important. Given the structure and intensity of the work of both full-time and adjunct trainers – and in the case of adjunct trainers, limited opportunities for formal and informal professional learning with others – it is not surprising that the trainers interviewed did not report engaging in reflection that requires a critical examination of underlying beliefs and assumptions that result in shifts in pedagogical practice. However, given the opportunity to engage in practitioner research and using their data as the source for questioning, trainers did engage in grappling with questions and issues that can result in rethinking practice.

Provider 2's practitioners who, at the time of writing of this report, had interviewed other trainers and learners, analysed their curriculum document and had begun to analyse it, were grappling with issues such as:

- Transfer of learning – what facilitates it?
- How to distinguish passive learning from applied learning?

- Examining the links between training and assessment – issues around assessment of learning and/or assessment *for* and *as* learning.
- The theory/practice nexus and ways of assessing.
- How to write curriculum so the learner is at the centre.
- Relationships between using activities such as case studies and levels of cognition (Bloom's taxonomy) (source of data from workshops with participating trainers).

Contextual conditions

Contextual conditions refer to those factors from both the situated and socio-political and economic environment. Contextual conditions identified in the data from the interviews and workshops include employment relations between trainers and providers, and curriculum. Curriculum development is mediated by institutional relationships and requirements of the Workforce Development Agency, as well as the skill set for curriculum development in the sector at this point in time.

Employment relations

The divide between full-time staff and adjunct trainers has been mentioned in the preceding section. The practice of employing most training staff as adjuncts has a number of consequences. One is that full-time trainers carry the additional load of managing and mentoring these staff, and another consequence is adjunct trainers do not have the same level of access to professional development opportunities as discussed earlier.

The additional workload in terms of number of audits and projects full-time staff is responsible for, as well as training, can have consequences for the quality of delivery. For example, this trainer laments:

> *I am teaching so many different classes, so I try to adopt a strategy as a facilitator so I don't have to study that much, because it's a never-ending story. I try to study everything, try to prepare everything; I also feedback to the management and say "Can I focus on just a few modules so I can go into depth?" but the management told me I have to do all these modules, so I can't cope, so I adopt the strategy to become a facilitator instead of a lecturer.*

Apart from providing an indication of a high workload caused by the wide spread of different topics the trainer needs to be familiar with, this lamentation leads us to ask, how does this trainer understand what it is to facilitate? This comment is contrary to management's expectation that trainers facilitate.

This researcher's observation of trainers as the research workshops progressed was that the full-timers are indeed very busy people and that adjunct trainers, some

more so than others, take on a lot of training, as it is their "rice-bowl"; opportunities for work are not something to be missed. The observation made in the section on formal support and performance management that there is a "them" and "us" divide between adjunct and full-time trainers, while not directly observed over the course of working with trainers involved, is understandable given that each group has different needs, agendas, and demands on them.

Expectations of trainers/assessors

This section sets out the expectations of each of the providers separately. The expectations of Provider 1 reflect the concern the practitioner researchers have as reflected in their research question, "What is the experience of learners undertaking WSQ programs?" For Provider 1, trainers are expected to be open to ideas, respectful of all opinions, to be approachable, affirmative, to create an inclusive safe, comfortable environment, to encourage participation and to facilitate, more than lecture, and to have an "I am a trainee" mindset, that is, think from the perspective of the learner. It is this provider whose trainers involved in the project are investigating the research question, "What is the experience of [provider's name] learners in WSQ programmes?" One manager reported that,

> ... the passion must come first... We talk about how passionate you are and compassionate. In addition trainers are expected to facilitate, not lecture, and to "add value".

In addition, he adds,

> WSQ is not about lecturing; WSQ is facilitating. We are talking about adult learners; they have got a lot of background, they've got working experience with them, a number of years before they come to courses, so it's a matter of drawing it out from them. But the trainer also has to add value. If the trainer doesn't add value then I think we have failed them.

A specific example of the expectation that trainers facilitate, not lecture is expressed in the observation that management of learning and the meeting of learning needs of different learners through employment of facilitation skills is important and that it "is not one-size-fits-all; you must know your trainees' profile very well". To this end, trainers are expected to be creative in their interpretation of curriculum and of learning design; "you see the creativity coming out of the trainer and that is what essentially I like to see in everyone too''.

Developers and trainers are expected to explicitly build in generic skills to the structure and management of learning.

> In our curriculum, we focus a lot on group participation – getting them into groups to brainstorm, think of ideas and so forth. That taps on

what they already know, not only that but we are also teaching them how to work together as a group, which is something that they need to know because if actually they'll be working in groups when they work outside.

Trainers are expected not to look for regurgitation of content, but to oblige learners to apply their knowledge. This requires trainers to interpret the responses and relate these to the performance criteria. This interviewee comments that trainers ask her:

So how did you clear this and how did you clear that? My students have written this. Then I wouldn't give the trainers answers as well, I continue to facilitate, so I [ask], what do you think, do you think the students show understanding of the knowledge skill? That's what you are looking for. At the end of the day this is what we want. We don't want him to regurgitate something and it's not relevant, the question now; as long as you think the student now shows understanding and not just understanding but good understanding, if you think in your assessment that you think he qualifies, he qualifies. So I say, "I can't tell you yes or no."

Providing learners with critical feedback is encouraged, as reported by one trainer,

I tell them [trainers] "You do not keep quiet, tell them [learners] during training on the spot what they have done well and what are the mistakes they made, so that the rest of them can continue to learn from that mistake on the spot or see the best practice and continue to do the best practice for the next three hours, so to speak... very few people actually exercise that. So I suppose they couldn't quite shake off the old school of training, the old style, and to learn from or to apply ACTA effectively.

The latter comment that very few people exercise best practice suggests that the practices expected of trainers are not necessarily as wide spread as hoped for. Some considered there were trainers (not those participating in this project) who were not comfortable or yet able to exercise the judgement called for in judging competence where responses were outside the set answers. However, the quality assurance and staff development documentation indicate that trainers are expected to facilitate (not lecture), to nurture their learners, to work with learner difference, and to make judgements about curriculum and assessment. Many, although not all, of the trainers interviewed appear to have an implicit belief about learning that would encourage them to facilitate and to nurture their learners.

For Provider 2, the expectations were not quite as explicit, although there was a shared expectation that facilitation, not lecturing, is expected and that trainers should be creative.

> *Don't be influenced by [strict requirements] and then be stifled by this that we must follow. By all means, try out different modes of teaching, because here you need to really understand the profile and continuing education and training is actually the toughest, unlike the PET.*

This manager goes on to add that motivating learners is important.

> *The biggest challenge of a trainer is actually how to motivate all the trainees who have different motivational levels. That is actually the toughest, tougher than the technical knowledge.*

When recruiting trainers, some of the qualities looked for include, charisma and an ability to communicate content knowledge clearly, "you must be able to translate the knowledge, you must be personable, you must have that charisma".

Both providers mention the curriculum, and their expectations that trainers respond creatively to the curriculum. However, as will become evident in the following section, there is a tension between this expectation and the organisational requirements. Curriculum was reported as having a major impact on trainers' practice.

Curriculum

In this section, trainer's perceptions and comments about curriculum are discussed, as well as the ways in which trainers navigate the curriculum, assessment, expectations of learners, and tensions between curriculum, learner needs, and trainer's professional judgement.

Perceptions of curriculum

A prevailing sentiment among the trainers is the requirement to work quite strictly or "go by the book", because the curriculum has been approved by WDA. Some trainers expressed the need to "stick close" to the curriculum as the process of validation and signing off takes time. One manager clearly stipulates the "need" to keep to approved curriculum, and at the same time to contextualise the material.

> *When a set of curriculum is given to the trainer, it belongs to the organisation and that's something that you have to respect because I would take for granted that this set of curriculum has been approved by the organisation, gone through the accreditation process or through certain authorities and it is there for a reason. So I should respect that and on top of that, if I want to contextualise, it is above and beyond, it*

should not be a dilution or I shouldn't take things away or replace it with my own stuff - no, that should never be.

In the case of this provider, there are module coordinators, and it is to these people, comments this manager, that feedback needs to be given and "the onus lies with them, the curriculum owner or the organisation to make changes".

Yet the perception from trainers is that change is difficult and perhaps best avoided.

I can add but I cannot delete. I can add a lot of information related to that particular topic, but I cannot say "I don't want to talk about it".

We better stick close to whatever; if not there'll be a lot of to-ing and fro-ing of validation or signing off of the documents.

For WSQ, again politically correct, I would not change anything. [Laughs] No, I think… yeah, I mean my experience, my encounter is that I think WDA is quite strict on whatever we… this is a perception… of whatever we do, so I think it is to stick as closely as possible to the curriculum.

Some trainers commented that there is a need to keep to the curriculum especially in the case of Competency-Based Training:

If it requires me to reach a certain stage of competency standard, I have to go by the book. If I don't go by the book, how will they know what I'm going to teach them?

Another trainer observes that:

[There is] no point going through the slides without doing any linkage. The pieces are really fixed, you can't change it, but… I would use examples that will draw the understanding

Some trainers noted that in cases where more than contextualising is needed, e.g. customization, there is a need to seek WDA's permission, "when we do it we also seek WDA's permission… we make sure… we conform to the standards and the guidelines." This is explained in the following quote:

Yes, I changed a PowerPoint and then submit to (CET Centre); (CET Centre) will then submit it to WDA. I think we can contextualise to a certain percentage; I can't remember.

It appears that trainers have a clear message that the curriculum must be followed; that you must contextualise the curriculum materials and that any change to curriculum creates problems and can take time. There is also a strong perception

that competency-based training requires standardised ways of meeting the standards – despite the needs of learners being different and the different needs embedded in different contexts. Having noted this, providers undertake regular formal reviews of each module where they request input from trainers about modules that they have taken. It is beyond the scope of this project to determine the extent that feedback is taken into account, acted on and to what extent changes to curriculum materials are made, and/or submitted to WDA for approval. Such processes require considerable time on the part of the full-time trainers who undertake this work.

Navigating the curriculum

Despite the perception and understanding that curriculum should not be changed, only contextualised, trainers with extensive experience who were confident of their training abilities do make changes.

As identified in the section on Trainer pedagogical beliefs, all trainers spoke about using their personal experiences and stories to contextualise the curriculum in order to bring out learning points. Trainers look beyond the curriculum, and devise ways to enrich learning, to "value add", and keep learners engaged. Perhaps the most confident trainer we interviewed commented that she does not use the PowerPoint slides, rather she uses storytelling and problem solving.

I do a lot of storytelling, problem solving to do my training and I find that I get more out of it than using PowerPoint slides, because what happens is PowerPoint slides distract the students; they're all so busy trying to copy and a lot of times PowerPoint slides do not make short notes, okay, and so you find students trying to actually do the matching and because of that they're very distracted; and because they're distracted they're not listening to you as a trainer or lecturer. To me, if that's the case, then why bother to put me there? Just go read your notes and be done with it, okay.

This trainer is concerned with challenging her learners and at the same time talks about nurturing them. It appears that learning is at the centre of her classroom activity. Another experienced, confident trainer commented that her focus initially is on the learners, rather than the curriculum.

The first day every time I start a class I don't really follow the lesson plan. I can't follow it because it takes me time to understand the students

Her statement that "she can't follow [the curriculum]" emphasises her belief in placing the learners at the centre, rather than the curriculum. By implication she is suggesting that the opportunity to know and place learners at the centre is not built

into the curriculum. She states that in terms of the curriculum it is necessary to "pepper it [curriculum] with a little bit of salt… give a bit of sauces and then it tastes much better". This analogy suggests she takes a flexible approach to the curriculum, while being true to it; it is not something she considers as a straitjacket.

A flexible approach to the curriculum is required for reasons other than taking a learner-centred approach and placing learning at the centre. Time management, response to learner feedback, student pace and the need for different learning activities, are all factors that mediate trainers' approach to and management of the curriculum. Some sections are "too long", others are "too short", the desire to "add in a little bit of my fun stuff, a little bit of interesting things rather than everything being so dry". A "very heavy curriculum" and the need to balance this with learners' need to "have dealt enough with the subject matter to expand the gap of their understanding" is a motivation for trainers to take a flexible approach to the curriculum

> *Where I know it's less helpful, but I'd rather take the time and put it in places where it's meaty and meaningful than to run through the whole curriculum. Because if I've got 15 topics and I do it very poorly I would have wasted your and my time. I'd rather take 10 very good topics... So when it comes to topics, sometimes, the students take the whole chapter and I say "Just give me two things" because the chapter is so big, two things, because then I know you have learned it, because otherwise you have just been a superficial learner.*

The last comment about being a "superficial learner" suggests that this trainer is concerned with ensuring her learners have a deep understanding and are not just regurgitating the material. Manipulation of the curriculum, however, can lead to tensions for the trainer and for some learners. For example, one trainer who limits her use of PowerPoint notes that:

> *There are some in the class who love it because they don't like PowerPoint slides and they don't like to open the book. But there are some, it's like "Miss [name], you haven't even opened your book.*

This observation raises possible questions about the extent to which curriculum takes into account different learning needs and ways of learning; on the other hand it may be about trainer approaches and classroom management of learning.

A different trainer mentions that he tries to follow the times set by the curriculum developer "but I found that it was quite difficult because it's also the students' pace". Many trainers commented on the background of their learners, for example:

> *We've got a few who are really people who should have never been in the programme, either because of their poor command of English or just poor approach to learning.*

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A number of trainers commented on differences between learner's ability with English and the level required to complete the module or course successfully. Similar comments are made about learners' tendency to regurgitate or plagiarise material.

> *When an assignment is passed on to them they don't make an attempt to understand what it is; they head out, they plagiarise the whole thing and then they come back and try and pass it off hoping that you'll be silly enough or you'll be "lax" enough because you're not serious about what you do.*

This quote begs the question: do trainers teach metacognitive (learning to learn) and study skills? When we asked if trainers deliberately taught metacognitive skills, with the exception of one trainer, all replied that demands of the curriculum do not provide time to do this or trainers were puzzled about the concept of learning to learn.

It appears that trainers are constantly juggling the demands and needs of their learners, the curriculum, WDA and provider requirements, desired outcomes and time.

Assessment

Trainers made observations about assessment, commenting when we asked, "How do you know your learners are learning?" that the assessment is often the time when you know what learners have learnt. The formal assessment is assessment of learning (Earl, 2003) or summative assessment. However trainers also spoke about using assessment for learning (ibid), although there was little reference to assessment as learning. For example, many trainers said that they know learners are learning from their contributions to class and group discussions and the extent of their participation. Trainers would deliberately use discussion opportunities to make these judgements, and adjust their training accordingly as explained in the following quote.

> *I give them real life examples, I probe them and ask them to give examples and to determine which part they did not understand about the questioning or which part they do not understand about the concept and then try to break it down to bite sizes to help them to understand better.*

Trainers reported that evidence of learning could be sought in a number of formal ways, not necessarily summative assessment and through ways in which learning is structured. Formal ways included using quizzes and submission by the learner of their learner guide. Assessing learning through structured learning activities includes

asking learners to articulate some of the points they were taught[3]; using case studies and identifying solutions, "you roughly can tell whether they have grasped the concept or the learning points"; using video of learners applying their new found skills and knowledge and asking learners to look at it, to review it; and, if at the end of the class learners have more questions than answers. Typical comments from trainers are given below:

> *It's through their interaction in class and you listen to them and they answer you. Even watching their body language can tell you whether they are learning or not; and actually the most powerful thing is that at the end of the class when they go back up there and when you do your walk around and you see them practising it.*

> *Usually it's during when we ask questions or when you look at their work.*

> *In the process of clarification as they ask questions and sometimes you observe it's a journey. When they started asking that question they are really not clear and as it moves along, finally there's always this "ah-ha" moment that they say "Okay, so this is what you're trying to teach me" or "This is how I can apply it in my job; I see the relevance".*
> *When they are able to tell me what they have learned in their own words, not repeated to me, and they can make it up back to their own words. So at least I know that they have the understanding, they know how to apply it back to the workplace. I always ask them to pick up one important thing and bring it back to the workplace.*

> *We get from various clues like the body language, the facial expression, the eye contact, whether they are listening to you or looking through you, and actually asking questions, walking around while they're doing their assignments. There's no one single way.*

> *They start to work out what kind of scenarios; I can observe them, they are very responsive. So then I know, oh, they are learning; they are willing to try. If I ask them and they keep quiet as if to understand, everyone just keeps quiet, then I find, okay, that's a problem.*

The last quote suggests that this trainer gives some responsibility for learning to learners and strongly emphasises application.

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[3] However it was noted that the problem with this is the danger of regurgitation.

Trainers observed that assessment is not only assessment of the subject matter; it is also an observation on the part of trainers that learners develop.

> *A sense of confidence, understanding and being able to apply it in their job; sometimes that comes across as well, when they become more confident and it shows.*

Trainers also commented on limitations of formal summative assessment. For example, "whether they [learners] apply it and so on, I'm not sure" was an observation made by a number of trainers. This is a limitation of assessment based solely in the classroom or assessment that is paper-based as noted in the following quote:

> *... that's [seeing learners practice] how you do your assessment. Because sometimes I feel that paper assessment doesn't help, you know.*

Some trainers found assessment processes that require very specific responses to be problematic, for example, suggested answers in some materials are "way off". Another trainer reflected that:

> *... sometimes I find the assessment is, to me is too shallow. They will answer true and false questions, which I think anyone can answer. I don't know why there is such an arrangement and call it assessment.*

In one instance, a trainer mentioned that the performance criteria for one programme were not clear, requiring considerable judgement on the part of the trainers. The trainer addressed this issue (until such time as the performance criteria were clarified and rewritten) by looking at how learners "contextualised around this theory". She noted that other trainers were not always confident in making these judgements, as they were more familiar with responses that required specific wording.

However, another trainer reported that she explicitly says to her students she wants to see evidence of application, not regurgitation of the theory in the project work.

> *I say, "Okay, these are my guidelines; you go and do what you want with it. I'm not going to insist that you follow it word for word or the format, okay. I'm just giving you my guidelines but these are the things I expect to see at the end of the day", and by leaving them to do that, they come back with brilliant wonderful work, versus a person who says "I want this, this, this, this, this." They can't deliver, and this is the same batch of students; so it's all about creativity, giving them the freedom of choice, you know... it's again about freedom, letting them be responsible for their own work and they can produce even better work. It's because they're adult learners; you are giving them the*

independence to put into place what they know. You are not stifling their creativity by telling them, you know, you do this, you don't do this, you fail, okay.

There are a number of principles embedded in this explanation, namely, principles and guidelines that provide for choice and foster independence in learning produce strong learning outcomes. Prescriptive requirements limit and restrain learners from showing what they are capable of.

One manager comments:

We should not be tied or restrained by the curriculum. A good trainer must be able to make the training relevant to the learners – I think that's very, very important. I don't believe in using a fixed set of materials and just delivering the materials. At the end of the day the materials must be useful, they must be relevant, and the learners must be able to take home and to find that it is easy for them to apply it in their daily work – so that is a must to me. Oh yeah, I don't believe in using one set across all the learners. So to me that's possible. It is possible through the experience of the trainer and the investment of time the trainer must put in to understand the profile of the people, the learners, as well as to invest the time to read up or to at least prepare himself to give a certain set of examples and illustrations that are relevant to the learners that he is training.

This is the same manager who also commented that the curriculum must be followed, as there is a larger "organisational agenda to be met". This contradictory response highlights the tensions created by requirements for adherence to a pre-set curriculum and the WDA Quality Assurance and funding implications if curriculum is not followed. A number of trainers explained that Quality Assurance Officers had commented that the curriculum states that you are to be doing group work or a particular activity in relation to specified content at a particular time, but you were not!

However, when teaching non-WSQ courses, several trainers commented that they always make adaptations to any curriculum. Given that trainers can and do make changes to curriculum, we must ask, are the strict requirements about following curriculum limiting innovative pedagogical practices? Are learners needs best met through strict adherence to set curriculum? To what extent are industry needs met through strict adherence to curriculum?

Issues in Engaging in Practitioner Research

Trainers participating in this project are being asked to give a considerable amount of their own time. For adjunct trainers, outside of opportunities for income and for full-time trainers, participation often meant taking yet more work home. The regular workshops that took place each fortnight, in the case of Provider 2, were always attended by the same two full-time trainers and one adjunct trainer, with other participants taking part in occasional workshops. Adjunct trainers would often be training at the time of the workshop, making it impossible for them to attend. A leader emerged amongst this group of participants, and it was her work and organisation that kept the project moving with regular fortnightly sessions, where we organised who in the group would collect what data and so on. This leader developed a project timeline, which is an important tool for the progress of these projects. Workshop sessions were lively and fun.

In the case of Provider 1, many of the workshop sessions were attended by the two full-time trainers, often supported by two to three adjunct trainers. Other participants found that their schedules clashed with pre-arranged sessions. Some workshops were moved to evening sessions in an attempt to be more inclusive. Workshops were not held regularly for this provider, rather we began by trying to find common times, but this proved impossible. We then moved to setting up a timeline for completion of their project and set up workshops at key points, for example, interviewing techniques and analysing data. In the end it was necessary to meet with trainers either in pairs or individually to provide the group with access to information and techniques about interviewing processes, including ethical issues and interviewing techniques. Commitment from all participants is strong, despite the difficulties in attending workshops. This issue of time to attend sessions typifies the difficulty trainers have in accessing formal professional development sessions.

Other issues such as access to funds for conducting research also emerged. For example, funds are required to have interviews, focus groups sessions and so on, transcribed. This was addressed by allocating a set amount for each provider from the research budget of this project. For future practitioner research, the IAL Small Research Grants Scheme (SRGS) would be a source for funds required to undertake such research.

As part of undertaking this project, this researcher has developed a series of resources for practitioner researchers. There is a need to put these resources together in a practitioner researcher guide that would also include tips and proformas that would assist practitioners in undertaking research. Ways of working with practitioners requires any equivalent person in the role this researcher has been playing as facilitator of the research to be highly collaborative and to find ways of ensuring that the practitioner researchers own their projects and do not see them

as an IAL project. This issue of ownership has arisen, in part because the practitioner research projects are a sub-part of the overall project.

Summary

Trainers in this study are committed practitioners who care deeply about their learners. These trainers have varied pedagogical beliefs, as would be expected. However, there appears to be a tendency towards teacher-centred approaches. There is a difference in language used and actual strategies indicative of approaches that are considered to be learner-centred, but may be implemented using teacher-centred approaches. Trainers are keen to learn more about keeping their industry knowledge up-to-date, managing pedagogical processes, and understanding pedagogical theory as it relates to practice. There is strong evidence that these trainers actively seek out professional development and learning activities, particularly those arranged by the provider where most training is undertaken or they are employed with.

There appears to be something of a divide at times between full-time and adjunct staff, expressing itself as a "them" and "us" culture. This arises from the nature of employment, subsequent employment opportunities and a potential unwillingness to share as a result. This culture limits possibilities for genuine exchange and learning in communities of practice and meetings for example, not only for individual trainers, but also for the provider themselves.

Curriculum is perceived by trainers to be a major factor in their approach and may also contribute to differences in language use and strategies used. There is a very strong perception that curriculum is inflexible.

The issues in this findings chapter are further interpreted and recommendations made, in the next, and final chapter.

Conclusion

The previous chapter highlighted a number of factors related to practice, curriculum and professional learning. This chapter uses the data discussed in the previous chapter to conceptualise the findings and to make recommendations. To assist the addressing of the research questions in this initial report for this project, the chapter has been organised into the following major sections: practitioner pedagogical beliefs, curriculum and pedagogy, and professional learning. An emphasis on curriculum as a major contextual factor in the mediation of practitioner and provider behaviour identified in the previous chapter is why a whole section is dedicated to the relationship between curriculum and pedagogical beliefs.

Recommendations are embedded within each section and also pulled together at the end of the chapter to allow for easy viewing. It is important to remember that this report is delivered mid-way through the project and that the findings and subsequent conclusions are therefore not complete. The next report for this project will be in relation to the survey findings, and the final report will focus largely on professional learning.

Pedagogical beliefs

As would be expected, practitioners hold a range of pedagogical beliefs and employ a range of strategies that we can draw on to make some assumptions about what the dominant practices are, and therefore what the nature of the "contract" is between teacher and learner. Hildebrand (1999) suggests that one way of thinking about identifying dominant practices is to ask basic questions such as, are students expected to answer questions and/or to ask them, are students expected to produce or reproduce knowledge, is there a climate of problem posing and problem solving (see Literature review)? To name one's pedagogical beliefs is difficult; it is a philosophical question one has to grapple with. It helps to have access to a language to do this, and thus to be able to reflect more deeply on the implications of stated beliefs, intent and actual practice.

The ways in which beliefs mediate the contract between practitioners and learners can be understood in a number of ways. We can explain the contract using different metaphors, label them in theoretical terms, place them along a continuum and/or understand the nature of the "contract" between practitioner and learners in terms of roles – that is, division of labour – between practitioner and learners. Let us look at each of these.

Acquisition and participation metaphor

When learners are answering questions, not asking questions, reproducing rather than creating knowledge and not being given opportunities to engage in problem identification, problem posing and solving, these approaches can be understood as belonging to what Sfard (2008) calls the acquisition metaphor, or what Friere (1993) calls the "banking" metaphor. The banking metaphor assumes a person has an "empty "mind", passively open to the reception of deposits of reality from the world outside" (Friere, 1993, p. 75). In other words, there is an assumption that a person is not part of the world and with others. This assumption "transforms students into receiving objects" (ibid, p. 77). The metaphors of actor, stage, and audience used by a number of practitioners interviewed belong to this metaphor.

However, if learners are asking and posing questions as well as seeking to answer them, engaged in problem identification, problem posing and solving and thus engaged in the creation of knowledge these approaches belong to Sfard's definition of the participation metaphor or Friere's concept of partnership. There is some evidence to suggest that practitioners seek participation of their learners through discussion, drawing on learner stories, role play and case studies/scenarios. However, what is understood by participation is variable and it is also unclear from the data what the practitioner's intent is in facilitating participation.

Teacher/learner-centred continuum

The acquisition-participation metaphor can be placed at either end along the teacher-learner centred continuum. The acquisition metaphor places the teacher at the centre, they are the holders and imparters of knowledge, and they are active in their imparting knowledge to their "audience". The participation metaphor places much greater emphasis on the learner and learning, with the learners being active meaning makers, and the practitioner playing the role of facilitator. There are many ways and forms of participation. At the learner-centred end of the continuum, learners have input into goals and learning processes under the guidance of a facilitator. It is very rare to see this taking place particularly in competency-based environments; rather the reality is that participation is likely to take place in other ways (e.g. group discussion, role play) and with the learner having less control than they do at the learner-centred end. As noted in the literature review, the reality is that practitioners move along this continuum, as Doreen (see vignette in Findings section) indicated when she refused to limit herself to any one label. However, for many practitioners there is a dominant approach. Pratt, Collins and Slenger (2001) note this when describing their teaching perspectives inventory (see literature review). It appears from this data set that many participants would be more towards the teacher-centred end of the continuum. However, we also need to ask why this is so. The following section on curriculum suggests curriculum design as a factor here, along with perceptions that curriculum cannot be changed.

Role of practitioner and learner

The two metaphors of acquisition and participation place practitioner and learner in particular roles. That is, the division of labour between the two changes as the metaphor changes. The acquisition metaphor results in passive learners who soak up and regurgitate knowledge that is static. The participation metaphor results in engaged learners who actively seek to make meaning. The facilitator plays multiple roles, initially sets the rules of engagement to allow learners to be active meaning makers, creates a supportive environment where learners individually and collectively are encouraged to be risk takers, innovators, and learn from each other. The facilitator is a resource enabler and guide (Hogan, 2003). Figure 3 illustrates a mutual, overlapping relationship between facilitator and learners that enables learners to be teachers of each other.

Figure 3. Participation metaphor

Participation

Participation requires dialogue between learners and between facilitator/practitioner and learners, a pre-requisite for engagement as the work of socio-cultural researchers such as Wenger (1998) and Chaiklin and Lave (1996) inform us. Sharon's vignette is illustrative of a number of practitioners interviewed for this study who are particularly cognizant of the wealth of knowledge and experience adult learners have as sources for participation and engagement. As the vignettes illustrate, to gain engagement, there are factors other than relating content and concepts to what learners already know, and understanding learners' experience and knowledge. Ping Ping for example, talks about the need for learners to feel respected, Jacqui about the need to challenge learners, and Nicholas about constantly reading learner responses and being responsive. These practitioners also discuss the need for dialogue, for engagement. One of the founders of modern day pedagogy, Vygotsky (1978), highlighted the need for dialogue, arguing that learners need to work with a more skilled and knowledgeable partner within what he called the "Zone of Proximal Development" (ZPD), in which learners socially construct meaning. Lave and Wenger (1991) argue that learning is more complex than the immediate social interaction between learners in a classroom setting. Rather, they argue that learning is embedded in everyday activity, our sense of self and the multiple settings in which we live and work. The enculturation of learners into a community requires participation and engagement to draw them from the periphery to the centre of a community (be it in a classroom, a work setting, a community setting). A number of practitioners interviewed in this study highlighted the importance of enculturating learners into the industry.

The role of dialogue and how it takes place in WSQ classrooms and other settings (e.g. workplaces, online) cannot be commented on in detail here, as it is beyond the data collected to date. However, it would be useful to better understand the nature of the contract between practitioners and learners and the role, purpose and nature of dialogue. For example, to what extent does dialogue in WSQ settings serve the following 12 principles set out by Vella (2002, p. 4) who notes that dialogue is an underpinning assumption in the 12 principles?

1. Needs assessment and engage learners in naming what is to be learned
2. A safe environment for learning
3. Sound relationships between learners and between learners and "teacher"
4. Sequence content appropriately and provide opportunities for reinforcement
5. Praxis: action with reflection or learning by doing
6. Respect for learners as decision makers

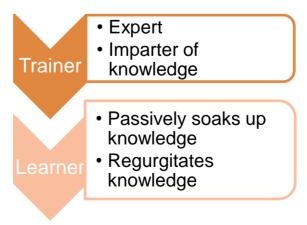7. Ideas, feelings and actions: cognitive, affective and psychomotor aspects of learning
8. Immediacy of learning
9. Clear roles and role development
10. Teamwork and use of small groups
11. Engagement of learners in what they are learning
12. Accountability: How do they know they know?

Participation and engagement challenge learners and practitioners to operate at higher cognitive levels and engage learners and practitioners, recognising and utilising the learning process as that is a whole of body experience; it is not solely a cognitive experience.

The acquisition/banking metaphor

In the Findings section, this researcher noted that a number of practitioners used the term "imparting of knowledge". Anecdotally, the term is heard to be used often. The term "imparting knowledge" is highly indicative of the acquisition/banking metaphor, however, there may be a difference between intent and the use of the term. Figure 4 unpacks these metaphors, illustrating that with this metaphor, there is a hierarchal relationship between practitioner and learner. The learner has minimal engagement with content knowledge. Learning is generally of a low cognitive level, requiring learners to list, restate and give reasons as given by the practitioner. An example of this requirement is part of the assessment for ACTA Module 1, where learners are given a competency map, it is explained in class, learners make notes and the same competency map is used in the assessment; learners simply regurgitate what they have noted from the practitioner's explanation. Cognitively learners are operating at the lowest level. Practices such as these limit affordances for application in other contexts (Tennant, 1999) and frameworks and reinforce the acquisition – banking metaphor.

Figure 4. Acquisition-banking metaphor

Particular tools such as PowerPoint, like any other tool, mediate our relations with others. It is a tool of the banking metaphor. The vignettes illustrate that practitioners work hard to "soften" and make relevant the PowerPoint slides they are required to work with, by adding in stories, photos giving visual examples and in some cases using other forms of media. This is not to say that photos, diagrams, stories and so on are tools of the banking metaphor; quite the opposite when used to prompt thinking and engagement.

Having unpacked each of the metaphors, it is important to remember that learning does require knowledge that is new to us and that this can be learnt in multiple ways. Sfard (2008) suggests a need to have a balanced approach to our use of these metaphors.

> *An adequate combination of the acquisition and participation metaphors would bring to the fore the advantages of each of them, while keeping their respective drawbacks at bay. Conversely, giving full exclusivity to one conceptual framework would be hazardous. Dictatorship of a single metaphor, like a dictatorship of a single ideology, may lead to theories that serve the interests of certain groups to the disadvantage of others. (Sfard, 2008, p. 42)*

However, it is still necessary to be clear what we mean by each of these metaphors and what it means for our learners. We need to name what it is we want learner outcomes to be, apart from the need to meet the competencies. What is it that practitioners want of learners? Is it to be able to regurgitate the content, is it to know how to learn, how to ask questions, how to problem identify, problem pose and solve, to critique and be supportive at the same time? Bruner (1996, p. 21) notes that, "in most matters of achieving mastery, we also want learners to gain good judgment, to become self-reliant, to work well with each other. And such competencies do not flourish under a one-way "transmission" regimen". Bruner also adds that, ""thinking about thinking" has to be a principal ingredient of any empowering practice of education" (p. 19). Yet our data indicates that practitioners either considered there was no think about thinking in the (metacognition) or they were puzzled by this question. Such responses lead us to ask: what is it we want for our learners and therefore for our practitioners?

Understanding pedagogical beliefs and theoretical perspectives

There is evidence of both the participation and banking metaphors being used by practitioners interviewed. There was also evidence of practitioners moving between the two metaphors, employing a range of strategies, such as sharing of stories, discussion and some use of problem case studies or scenarios and seeking to actively engage learners. One way of understanding this movement between either end of the acquisition and participation metaphor is by drawing on various theoretical perspectives, as illustrated in Figure 5.

The different theoretical perspectives shown in Figure 5 are briefly explained in the literature review. The teaching strategies placed along the continuum are indicative in their placement; depending on how the strategy is used and what its purpose is, will change the placement.
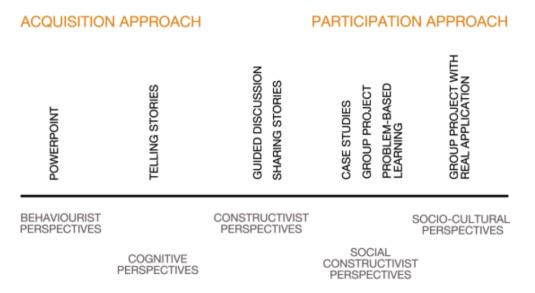
Figure 5. Theoretical perspectives and teaching strategies

Using stories

The telling of stories is a good example. If stories are told only by the practitioner and their purpose is to illustrate an example, there is limited engagement required of the learner. However, this "telling about" can serve as a valuable purpose of initially immersing the learner into the culture of an industry or organisation, or way of being. The enculturation process however may be enhanced by using an alternative to "telling about", by the sharing of stories. When sharing stories is used as a pedagogy for encouraging questioning, eliciting competing interpretations and exploring moral dilemmas, scientific evidence and controversial issues (Leach & Moon, 2008 shared "storying" has the potential for deep or even transformative learning (Karpiak, 2008). Karpiak suggests that teachers and learners telling and sharing personal stories together are powerful tools for creating trust and a deep

engagement. Figure 6 illustrates these suggestions in a diagrammatic representation.
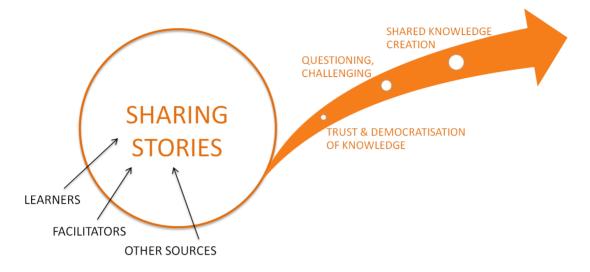
Figure 6. The potential of using stories

Leach and Moon (2008) remind us of Bruner's work on narrative. Bruner suggests that we organise and manage our knowledge of the world through logical scientific thinking and narrative thinking. This is so across cultures, although different cultures privilege these approaches differently (see Bruner, 1996). Just as the metaphors discussed above raise issues about our beliefs, about what is knowledge and about "knowing", so do the use of particular strategies, including the use of stories. In the Computer Supported Intentional Learning Environments (CSILS)/Knowledge Building Project, Scardamalia (2002) challenged the didactic approach of "telling about" with a wider conceptualisation of knowing. She developed 12 principles of knowledge building including for example, community knowledge, collective responsibility, and democratising knowledge (Scardamalia, 2002).

The small sample of interview data from this project suggests that stories are a major teaching strategy and used to contextualise and to bring the world of the workplace into the classroom. Whatever the mode of delivery, the use of stories is a strong way of working and should continue to be an emphasis. However, it would be useful to know of the ways in which stories are used, the purposes for which they are used and the degree to which they are or are not used to create knowledge.

Recommendations

The value of understanding practitioners' dominant pedagogical beliefs and their enactment is a starting point for reflective practice on the individual level. At the provider/institutional level, it offers opportunities to consider intended outcomes and actual outcomes. At the policy level, it is a starting point to consider factors that enhance or constrain particular approaches.

It is recommended that:

- IAL seeks to understand the match (or not) between ACTA as it is currently conceptualised and delivered and trainer beliefs and enactment of those beliefs;

- Providers articulate their pedagogical beliefs – This enables consideration of professional learning activities and the development of varied approaches to the enactment of these beliefs; and

- Policymakers identify what policies and the ways in which these policies are enacted encourage or inhibit particular approaches and beliefs.

Curriculum

The Findings section highlighted two major perceptions about curriculum, namely that:

- Curriculum should not be changed;
- Yet, curriculum requires adjustment to meet learner profiles

In response to these perceptions, more experienced, confident practitioners take a flexible approach to the curriculum to varying degrees, adjusting content, time, the order and structure of activities. All practitioners add in their own material. There is a sense that a number of practitioners feel restricted by the curriculum, with some commenting that they limit their teaching of WSQ because of the inflexibility of the curriculum. There are practitioners in the WSQ system who report that at times, they feel restricted in meeting learner needs and the extent to which they can truly contextualise materials and content because of the perceived inflexibility of the curriculum. These practitioners design their own learning activities to address these frustrations, despite the perception that curriculum cannot be changed.

Indeed the assumptions about teaching and learning that are built into a curriculum may be contrary to the practitioner's pedagogical beliefs as suggested by Jacqui (see Vignettes in the Findings section) who prefers to set aside the use of PowerPoint slides and use more active, engaging methods.

Figure 7 illustrates the ways curriculum structures and guides practitioner actions and learner actions, placing practitioners and learners into particular roles as shown in Figures 3 and 4.
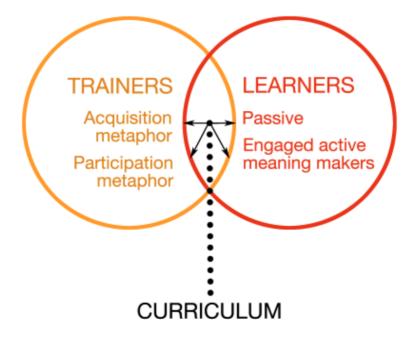
Figure 7. Practitioner and learner roles, and the mediation of curriculum

Standards are an implicit part of competency-based training; curriculum is not. There are many ways of achieving the same ends, or in this case, a given set of standards. The discussion above on pedagogical beliefs would suggest there are sound pedagogical reasons why we would want practitioners to be able to identify needs and design learning that meets these needs while implementing the type of principles outlined by Vella (2002) and Scardamalia (2002) and at the same time, meeting the required standards. The argument here is for flexibility, not necessarily for removal of curriculum.
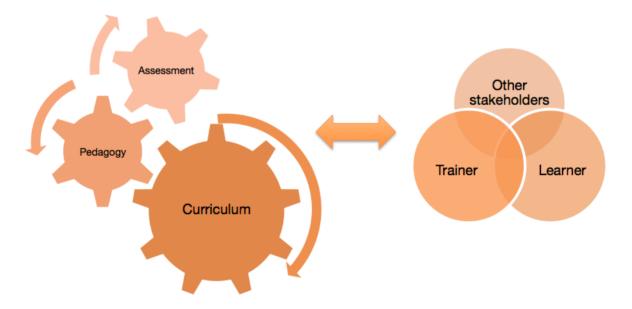
In Australia, for example, where curriculum was removed and replaced in 1997 by Training Packages (which are in reality a form of curriculum document) which set out the standards, range and conditions of competency, there is still debate about the value of "losing" the curriculum. Misko (2001) suggests a major advantage of Training Packages is that they provide a ready-made framework for training in workplaces, allowing for flexibility in delivery and assessment. Other advantages, as argued by Misko (2001) are that Training Packages have seen closer links between VET providers and workplaces and wider use of competency standards within enterprises. Waterhouse (2000) suggests that a lack of centralised curriculum creates opportunities for innovative teachers to create their own curriculum. The disadvantages include considerable variability in quality (particularly assessment-only pathways), teachers and workplace supervisors need advanced skills in order to structure learning activities, underpinning knowledge is not necessarily developed (Misko, 2010) and there is a lack of direction for teachers and supervisors. Smith (2002) notes that the British experience with National Vocational Qualifications (NVQ), introduced in the mid-1980s, has seen many of these advantages and disadvantages alike already highlighted and played out. She also notes that curriculum assumes classroom learning and therefore privileges this mode of delivery and this setting (Smith, 2002). Others argue quite strongly that Training Packages are not a good model for other countries as they may result in poorer student outcomes. Some eight to nine years later from these reports, Guthrie suggests that attention needs to be given to the quality of delivery and assessment, and that Training Packages could be better understood (Guthrie, 2009). The key factors are consistency of quality and flexibility to meet the needs of all stakeholders.
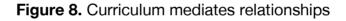
While appearing to be contradictory and in tension with each other, the reference to the potential for innovative teachers to create their own curriculum (Waterhouse, 2000) and the lack of direction for teachers and supervisors (Down, 2002) is not necessarily a contradiction. Both could apply. The key is the reference to innovative teachers. The data from this project suggests there are innovative teachers in the WSQ system, while there are others who may require the support and structure provided by a curriculum. Strict adherence to curriculum may limit the developmental opportunities for practitioners. There are two issues here; one is that there may be potential for innovative practitioners to develop their own curriculum

within a range of settings, and the other is increased flexibility in provided curriculum giving practitioners opportunities to truly contextualise and meet the needs of their learners. This would require curriculum to be less prescriptive and more a set of possibilities.

Development from novice to expert requires a degree of risk-taking, responsibility and support (Maudsley & Strivens, 2000). To what extent does a prescriptive curriculum limit the potential professional development of practitioners? What unspoken assumptions about learning and about knowledge are currently built into various curriculum materials?

The design of a curriculum and its underpinning assumptions about competency, learning and teaching implicitly sets up relationships between all stakeholders as illustrated in Figure 8. Curriculum drives pedagogy and assessment and establishes particular roles for practitioner and learners. The data from this project indicate that practitioners feel a limited sense of agency when it comes to changing the curriculum they teach to. Other stakeholders such as employers hand over responsibility for learning when the curriculum dictates full classroom delivery, whereas when there is some application required, employers become more engaged.

Figure 8. Curriculum mediates relationships

Recommendations

There is an overall perception that curriculum cannot be changed and therefore that WSQ curriculum is inflexible. There appears to be a strong relationship between curriculum design and classroom practice. The assumptions and teaching and learning embedded in the design of a curriculum mediate the roles learners and practitioners take on and limit possibilities for innovative practice.

It is recommended that:

- A representative sample of learner and trainer guides are analysed for the assumptions about teaching and learning implicit in their design. This can be undertaken by analysing, for example, cognitive levels at which guides require of learners, levels of engagement required of learners, and the intent of each learning activity.
- Stakeholders explore ways in which they can develop curriculum as a flexible document, not as a stipulated requirement. This will require close engagement with providers.

Professional development and learning

There is clear evidence that practitioners involved in this project are strongly motivated to participate in professional learning and development opportunities. Perhaps the strongest motivation for continuous learning, particularly self-motivated learning, is the need to keep up-to-date with industry knowledge and practice.

As would be expected, each provider has different professional development and learning opportunities for their practitioners. Both providers use observations and feedback to practitioners, however, one provider has developed this process far more extensively. This process aside, pedagogical support for practitioners appears to be somewhat random as it is based largely on access to full-time staff in their role of mentor. Access could be problematic from the perspective of time and the quality of support; full-time staff have multiple roles, including training thereby limiting the time they have available for mentoring. Additionally, in some instances, full-time staff may not have as much experience and/or pedagogical knowledge as the adjunct. Our data showed that in quite a number of cases, the adjunct staff were more innovative and displayed deeper pedagogical knowledge than some of the full-time staff. However, there are informal communities of support amongst practitioners, and in the case of one provider, a formalised community of practice.

The large number of adjunct practitioners in the sector poses particular challenges for accessing professional learning. Table 6 indicates that practitioners participating in this project appear to prefer to access training offered by the provider. It would be useful to understand why this is the case. Is it because of the contextualisation? Is it to do with established relationships and informal communities of practice, or other reasons? Understanding why this preference and how extensive this preference is across the CET practitioner community have implications for the design of continuous professional learning for the sector. These questions will be explored over the remaining time of the project, with the four providers involved in the project.

The examples given in the Findings chapter (see section on "Professional learning needs and access") managing pedagogical processes and understanding

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pedagogical theory as it relates to practice indicate practitioners are seeking to find ways of engaging learners, but as indicated earlier, there is still, for many of these practitioners, a focus on self as practitioner. The language used by practitioners, such as "imparting knowledge", "engaging learners", and "self-discovery" have different meanings for each person and the meaning of the latter terms do not match the theories from which the terms engaging learning and self-discovery originate. As discussed in the preceding section on curriculum, curriculum and the implementation of policy initiatives mediate practitioner's enactment of the curriculum. Professional learning for practitioners, then, cannot be conceived in a vacuum. If practitioners are given increased exposure and opportunities to engage in critical dialogue, that develops a shared language (Berry & Scheele, 2007) with which to critique and develop deeper understandings and encouragement to experiment with different approaches, to what extent are these aspects of critical dialogue encouraged or discouraged in their working environments?

Provider management, curriculum designers, policymakers, auditors and so on are all stakeholders in a process of change underpinning the very idea of continuing professional development. The question then needs to be asked, professional learning and development for what and for whom?

Practitioners have a deep concern for their learners and for many in this study, the opportunity to learn more about the learner and the process of learning is valued. Watkins and Mortimore (1999) note that:

> …an explicit focus on the learning process advances the learner's conceptions of learning, improves what they learn and increases the likelihood that they will see themselves as active agents in learning (p. 8).

If continuous professional learning were to have for example, a focus on learning and the learner, this would require a critical reflective stance. While practitioners engage in reflection, it is not critical reflection. Indeed, as stated by Borko (2004, p. 7) "discussions that support critical examination of teaching are relatively rare" and "developing teacher communities is time consuming and difficult". Borko suggests it is important to bring the classroom or teaching environment to the professional development setting. Thus, videos of sessions, samples of work, and plans are all artefacts for examining practice and developing ideas for improvement. However such approaches require more than the artefacts to develop a critical reflective stance; it requires a shared language, a framework (generally provided by theory) with which to provide alternative lenses to critique. The four lenses of teacher autobiography, learners, peers and literature (Brookfield, 1995) offer powerful artefacts and a range of lenses through which to enter into an enquiry about one's practice. The final report for this project will discuss the process of practitioners

being engaged in research and the ways in which this facilitates reflection, as one possible approach to continuous professional learning for the CET sector.

Recommendation

Different stakeholders have and meet different needs. Stakeholders relevant to practitioners' continuing professional learning include the practitioners themselves, curriculum designers, providers, policymakers, auditors and so on. We need to map these different needs and identify overlapping needs. It is in this space of overlapping needs that there is likely to be possibilities for fruitful dialogue about the hoped for trajectory for learners and therefore, for practitioners. In addition, we need to better understand the issues and concerns that practitioners are grappling with on a day-to-day basis in order to design a strategic professional learning approach. Therefore it is recommended that:

Further investigation is undertaken to identify the overlapping needs of the different stakeholders and to more fully document the day-to-day issues and concerns of practitioners. This is a first step in strategically designing continuous professional learning for practitioners.

Recommendations

- IAL seeks to understand the match (or not) between ACTA as it is currently conceptualised and delivered and trainer beliefs and enactment of those beliefs.
- Providers articulate their pedagogical beliefs. This enables consideration of professional learning activities and the development of varied approaches to the enactment of these beliefs.
- Policymakers identify what policies and the ways in which these policies are enacted encourage or inhibit particular approaches and beliefs.
- A representative sample of learner and trainer guides are analysed for the assumptions about teaching and learning implicit in their design. This can be undertaken by analysing, for example, cognitive levels at which guides require of learners, levels of engagement required of learners, and the intent of each learning activity.
- Stakeholders explore ways in which they can develop curriculum as a flexible document, not as a stipulated requirement. This will require close engagement with providers.
- Further investigation is undertaken to identify the overlapping needs of the different stakeholders and to more fully document the day-to-day issues and concerns of practitioners. This is a first step in strategically designing continuous professional learning for practitioners.

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