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Utilizing an Experiential Approach to Teacher Learning about AfL: A Consciousness Raising Opportunity

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Abstract: In this article we focus on how an experiential based approach to teacher learning about assessment for learning (AfL) provided opportunities for teachers to examine: their deep-seated beliefs about effective learning (and teaching); how these beliefs permeated their day-to-day actions and interactions with students, and the consequence of these actions and interactions for student learning. It also pays attention to how teacher selfefficacy in the use of various AfL strategies was developed through a heightened awareness of the beneficial effects of these strategies on teachers' **own learning** in particular.

Assessment for Learning

Globally, AfL has gained prominence over the last two decades (Gardner, Harlen, Hayward & Stobart, 2010). The principles and practices associated with AfL are now seen as essential components of effective learning and teaching. As currently conceptualized, AfL aims to enhance learning through the development of student learning capacity and self-regulatory and autonomous behaviours (Cowie, Moreland & Otrel-Cass, 2013). It is generally agreed that the following strategies are embedded within AfL practice: the promotion of student understanding about the goal(s) of learning and what constitutes expected performance, student engagement in peer review and self-monitoring, and the taking of action to bring about desired performance (James & Pedder, 2006). Although itemized individually, these strategies are inter-dependent, each feeding into and from the others in an iterative manner. Each is necessary with no one strategy being more or less important that any other – all contribute to supporting the student in furthering learning (authors, 2014). Thus, given its unitary nature, AfL is more complex than teachers adding individual strategies onto existing classroom programmes (authors, 2014; James & Pedder, 2006).

As such AfL now embodies and promotes new ways of behaving and interacting thus challenging the norms and behaviors associated with the traditional roles and responsibilities of teachers and students in both learning and assessment. By taking ownership of the goals of learning, monitoring progress and making improvements to work during its production, through engagement in such strategies as peer response and self-monitoring, students are now expected to be active and pro-active participants in their learning. In turn, it now expected that teachers would be both willing and able to provide substantial and authentic opportunities that enable students to acquire the reflective habits of mind necessary to become autonomous and self-regulating learners.

To date, despite the championing of AfL principles and strategies, changes to teachers' instructional practices have proved to be modest and cursory (Black, 2015; Wallace & Priestley, 2011). Although not the sole contributing factor, there is evidence that teachers' beliefs about their role and those of their students in learning are a mediating factor

in regard to AfL implementation (authors, 2011). As others have shown teachers continue to voice doubt about student capability and capacity to make accurate judgments and decisions about their learning (DeLuca, Klinger, Pyper & Woods, 2015; Hopfenbeck, Florez Petour & Tolo, 2015). Significantly, if teachers hold such beliefs then the role that students play in learning and assessment will be under-valued and underplayed.

Teachers' Beliefs

More recently, greater attention has been paid to how teachers' beliefs, including their efficacy beliefs, influence their interpretation and enactment of new ideas and practices associated with various educational reform agendas (author, 2011; Wallace, 2014; Wallace & Priestley, 2011). While these beliefs may remain private, tacit and implicit there is agreement that they have a major impact on the nature of instruction and the type of interactions that occur within a classroom. To date, research evidence has suggested that the iterative nature of belief construction as well as the enduring nature of beliefs can prove to be a major impediment to the implementation of reforms in ways consistent with the philosophies underpinning them. While teachers may adopt practical aspects of a particular innovation their tacit beliefs about teaching and learning, and the roles and responsibilities of teachers and learners in each of these processes, can prevent substantive curricula or pedagogical change (authors, 2011).

If teachers' personal beliefs act as the *"filter and foundation of new knowledge"* (Kagan, 1992, p. 75) it can thus be argued that, within the context of teacher professional learning, learning is facilitated for those whose beliefs are congruent with the ideas underpinning current reforms (Lumpe, Vaughn, Hendrikson & Bishop, 2014). Conversely, teachers' 'brittle' beliefs (Kagan, 1992) function to impede teacher learning. New knowledge or practices that prove to be inconsistent with teachers' personal beliefs are either rejected or 'domesticated' (Yung, 2001) to the extent that they can be assimilated into existing conceptions (Pajares, 1992). With particular reference to AfL, teachers' personal beliefs may prevent substantive change to occur within the pedagogical environment. These beliefs may also reinforce the status quo in regard to traditional roles and responsibilities assigned to teachers and students in relation to teaching, learning and assessment.

A study undertaken in Hong Kong (Yung, 2001; 2002) is one of only a few studies focused specifically on teacher beliefs and the introduction of new assessment requirements. Findings from Yung's studies showed that teachers' varying approaches to implementation were influenced by their beliefs about: what it meant to be a teacher, including the teacher's role in helping students learn; the student's role in, and responsibility for, learning; the nature of the relationship between teacher and students and how this should manifest itself in classroom interactions, both when teaching and assessing; and the role and place of assessment in teaching and learning. In a number of cases, teachers 'domesticated' the system of internal assessment to fit with their beliefs and established practices. Yung concluded that teachers' personal beliefs caused some to implement the new assessment approach in ways that were not only incompatible with the philosophy and intent of the innovation, but also detrimental to students' learning.

Teachers' Self-Efficacy Beliefs

In addition to the beliefs individuals hold about the world in which they live, they also hold beliefs about themselves, their abilities and capabilities. First published in 1977,

Albert Bandura's theory of self-efficacy highlighted the significance of self-referent beliefs in forming and regulating motivation, feeling and action. Self-efficacy can be described as an expectancy belief that is goal, task and situation specific. It pertains to an individual's belief in his/her capability to:

".... organise and execute courses of action required to deal with prospective situations that contain many ambiguous unpredictable and often stressful elements" (Bandura, 1981, p. 200).

Within the context of teaching, self-efficacy refers to the generalised expectancy a teacher has in regard to his/her ability to influence students as well as beliefs about his/her ability to perform the professional tasks that constitute teaching (Bandura, 1977). However, given the magnitude and complexity of teaching, a teacher's sense of self-efficacy may not necessarily be uniform across the multitude of tasks he/she is required to perform (Tschannen-Moran & Woolfolk Hoy, 2001) or the different subject matter he/she may be required to teach (Nespor, 1987). Despite these differences, robust efficacy beliefs are critical to teaching (Poulou, 2007). The strength of a teacher's efficacy beliefs will affect the magnitude of the goals set and the amount of effort expended to reach those goals. Additionally, efficacy beliefs will influence degrees of persistence and resiliency and whether or not coping behaviours are initiated in the face of setbacks (Poulou, 2007; Rimm, Kaufman & Sawyer, 2004; Tschannen-Moran & Woolfolk Hoy, 2001).

As early as 1988, Guskey investigated teachers' attitudes toward the educational reforms being introduced at that time. Again, efficacy beliefs were found to be influential. A strong correlation between teachers' levels of self-efficacy and their attitudes towards innovations was established. Teachers with a strong sense of self-efficacy were more open to new ideas and more willing to experiment with new practices. Furthermore, their outcome expectations were stronger. These teachers were more likely to believe that a change in their behaviour would have beneficial effects for their students. Other studies have reported similar findings (Ross 1998; Thomas & Pedersen 1998). However as Wheatley (2005) found, moving away from a traditional mode of teaching toward a student-centred approach can be perceived by some teachers as decreasing their individual efficacy as they no longer feel 'in control'. Furthermore, a teacher's outcome expectation can affect his/her motivation to use the advocated strategies and practices. These findings are significant given the role that teachers play in the uptake and enactment of educational reform.

Although there have been general calls to investigate internal factors such as the impact of teachers' self-efficacy beliefs on curriculum and assessment innovation research evidence about such factors is mostly absent in relation to AfL. The role efficacy and outcome expectations play in teachers' adoption, adaptation or rejection of AfL strategies has been largely ignored. Utilizing Bandura's (1977) theory of self efficacy our own work (author, 2011) highlighted how teachers' efficacy beliefs were influential in regard to the nature and magnitude of changes made to their AfL practice and the amount of effort teachers' expended in moving towards mastery of specific strategies such as peer response and feedback. We also discovered that teachers' willingness to persevere with the challenges inherent in implementing AfL strategies as well as their apparent resilience when faced with self-doubt was seemingly affected by their efficacy and outcome expectations.

The Potential of Experiential Learning to Uncover Teachers' Beliefs

While there is general agreement that beliefs are not affected or changed by the application of argument, reason or logic (Munby, 1984; Rokeach, 1986) there is less consensus in regard to how belief change occurs. Some researchers have argued that a

change in beliefs must occur before there can be a change in behaviour (for example, Ajzen & Fishbein, 1980). Others, such as Guskey (2002) have promoted the notion that a change in teacher behaviour that results in improved student outcomes, a state that all teachers seemingly strive to achieve, is sufficiently strong enough to change teacher beliefs. More recently, teacher professional development opportunities have been promoted as a venue where teachers' deep-seated, tacit beliefs can be examined, and in doing so be challenged and destabilised (Wallace, 2014; Yung, 2002). However, the crux of the problem lies in the best way to support teachers to unpack their core beliefs and reflect on the impact of these beliefs on practice, and on students' learning.

As teacher educators (and researchers) we have a long-standing interest in and commitment to developing experienced teachers' assessment literacy and capability. Cognizant that any change to practice is dependent upon the *"reflexive and discursive consciousness of teachers"* (Elliot, 1998, p. xiii) our work with teachers has been grounded in and informed by an experiential-based approach to learning (Boud, (1994); Dewey, (1938); and Kolb (1984). Like Kolb (1984) we see experiential learning as a continuous and transformational process, grounded in and modified by both past and present experience. We also also believe that although such experiences are the foundation of, and stimulus for learning, it is only through deep engagement and reflective activity that learners can *"recapture, notice and re-evaluate their experience to turn it into learning"* (Boud, Cohen & Walker, xxx, p. 9). Furthermore we acknowledge that the cognitive, affective and conative dimensions of learning are equally important. To this end we have aimed to offer teachers substantive learning opportunities, which promote:

- Engagement in AfL strategies from both a teacher's and learner's perspective;
- Reflection on learning about AfL both as a teacher and a learner;
- An examination of teachers' deep-seated beliefs as they relate to teaching, learning and assessment
- Teacher knowledge about and confidence in the ability of AfL strategies to bring about desirable effects for learners, as well as confidence in their ability to implement these strategies within the classroom.

In this article we focus on how this experiential based approach to teacher learning about AfL provided opportunities for teachers to examine: their deep-seated beliefs about effective learning (and teaching); how these beliefs permeated their day-to-day actions and interactions with students, and the consequence of these actions and interactions for student learning. It also pays attention to how teacher confidence in the use of various AfL strategies was developed through a heightened awareness of the beneficial effects of these strategies on teachers' **own learning** in particular.

The Research Design Research Aims

The research reported in this article has been guided by two questions:

- What beliefs do teachers have about AfL prior to commencing an undergraduate AfL course and at its conclusion?
- What course related experiences do teachers identify as having influenced their pre and post course beliefs, including their self-efficacy beliefs?

The Participants

Although teaching in New Zealand is now a degreed profession up until the mid to late 1990s teachers could enter the profession with a diploma of teaching. Hence currently, there are still teachers within the profession without a degree qualification. The context for the current study was a compulsory assessment for learning course in a degree specifically developed for experienced teachers who wished to upgrade their diploma of teaching to a Bachelor of Education (Teaching) degree. Taught to a range of experienced teachers, working across various education sectors, the course had always been rated highly. This message from teachers, conveyed through course evaluations and informal commentary, became the impetus for the development of a research project that investigated teachers' beliefs about AfL and the impact the course had on these beliefs. Consequently, 21 teachers, enrolled in the assessment course during either 2013 or 2014, took part in the research reported here. While all were experienced teachers, they taught in different sectors of education from early childhood through to secondary school. Three of the 21 held senior management positions in their schools, such as principal or deputy principal. Those who had classroom teaching responsibilities worked across a range of year levels spanning Years 1 through to 10. As with any research project, ethical approval was gained prior to the commencement and ethical principles and procedures were followed throughout the duration of the research. For example, to ensure there was no coercion of participants a third party, not known to the teachers enrolled in the course, had responsibility for recruitment. To ensure teachers were fully informed of the nature and scope of the research and participant expectations, verbal and written explanations were provided. Those who volunteered to participate sent their consent forms to the third party. Within the consent forms the full set of data gathering methods were listed and potential participants could indicate the ones they were willing to engage in.

The Course Content, the Delivery Modes and the Collection of Relevant Data

Taught over an 18 week period, the course was divided into two "blocks of study". The first block explored the international and New Zealand assessment policy context, examined "self-regulation" theory and its importance to AfL and the notions "assessment for teaching" and "assessment for learning". This block culminated in three short pieces of formally assessed writing about the nature of each of these concepts/notions. The second block considered the unitary nature of AfL, and explored in some depth the strategies that comprise AfL including an analysis of the respective and complementary roles of the teacher and learner. This block concluded with an extended essay where course members analysed and discussed the unitary nature of Afl. Within this essay teachers were also asked to reflect on personal areas of learning for them.

The assessment course reflected two complementary approaches. The first was a relatively traditional approach, albeit providing multiple opportunities for active and interactive learning. Each 150 minute session included a range of activities including: discussions of set readings and responses to prompts; group brainstorming and reporting back of key ideas underlying a central concept; in-class jig-sawing of brief extracts from the literature; brief quizzes; and short power point presentations and/or summaries of central ideas. In the second approach, the strategies of AfL were deliberately infused into all class sessions with the lecturer taking on the role of the AfL teacher, working alongside teachers facilitating teacher–learner and learner-learner dialogic interactions. Moreover the rationale underpinning class activities was explained during the use of specific strategies. In using

these two approaches the deliberate intention was that the teachers experienced AfL as learners while concurrently learning about AfL.

The first two to three sessions of each block of study focused on the goal or 'broad horizon' (Marshall, 2004) that teachers needed to work towards. From weeks two to six, annotated exemplars of short pieces of the formally assessed writing task, completed by teachers in previous years, were shared during class time. Teachers were then provided with the opportunity to debate and identify what constituted quality work. As teachers were preparing for the writing task they brought their works-in-progress to class, where time was set-aside in class to allow for in-class peer response and/or comparison of works to exemplars. During these activities teachers were encouraged to identify and discuss instances where they engaged in self-monitoring and/or self-regulation. Understandings about AfL gained from these experiences were shared, as they arose, during small group and class discussions. This process was repeated from week's eight to 12 with reference to an extended essay about how AfL develops student self-regulation.

As already mentioned, as part of in-class activities, teachers were asked to engage in various brainstorms and to continually reflect on what they were doing and learning. For example, during week one of the course, all class members completed a brainstorm activity where they were asked to reflect on five prompts and record their ideas:

- Assessment for learning is;
- Who benefits and how;
- The role of the teacher...;
- The role of the student ...;
- Describe how AfL is reflected in your / a classroom or centre programme. This activity provided a permanent record of teachers' initial understandings and

when repeated again during week 12 served as point of comparison that teachers could utilize to reflect on changes to their thinking / and or beliefs. An opportunity to discuss changes to thinking with peers was also provided to support teacher reflection. Finally, to draw their reflections together, teachers completed a written reflective statement under a series of headings as follows:

- After comparing my two sets of responses my initial reaction is
- Identify the responses that have changed most, <u>HOW</u> they have changed and <u>WHY</u> they have changed;
- What is the MOST significant thing that you as learners have learned about AfL and WHAT has prompted this learning;
- Outline briefly WHAT classroom / centre practices you have changed as a result of your learning in this course and explain HOW they have changed.

As part of the research project, copies of the data generated by these activities were collected to retain a permanent record of teachers' thinking. In addition, to supplement these data, individual interviews with 14 of the 21 teachers were carried out during weeks 10 - 12 and in the two weeks following the end of the course. Given our aim to support teacher learning about AfL, we wanted to tap into teachers' reactions to the course and how it was structured. Specifically, questions tapped into how course experiences had contributed to teachers' knowledge and understanding of AfL strategies and the perceived usefulness of these experiences to teachers' own learning and to their professional practice. To ensure teachers felt comfortable to give honest and open responses to these questions an independent, experienced interviewer with no direct involvement in the course conducted the interviews. During the time when the project took place (2013-2014) author was the sole lecturer in the course.

Data Analysis

To ensure participant anonymity all data sets used in the project were anonymised by a research assistant through the use of coding system e.g. Teacher 1. Once anonymised, data sets were systematically analysed with codes assigned in a manner consistent with the constant comparative method (Strauss & Corbin, 1998). Concepts central to assessment for learning were used in the first instance to generate open codes. Examples of such codes included 'monitoring achievement' 'noticing, recognising and responding', 'taking responsibility for learning' and 'peer review and response'. Additional codes, such as Bandura's (1977) notions of 'efficacy and outcome expectations', and the four sources of influence ('mastery experience', 'vicarious experience', 'verbal persuasion' and 'physiological and emotional state') were inductively developed from and applied to the data. Once the process of open coding was complete these codes were then compared and grouped to create axial categories that captured the properties of and relationship between codes, for example 'the role of the teacher' 'the role of the student' 'being effacacious' and 'teacher as learner'. Essentially these axial categories were cross-cut and linked at both a descriptive and conceptual level to identify patterns and relationships (Ezzy, 2002; Strauss & Corbin, 1998). Deliberation on these categories generated the two major themes, which form the basis of this article. The first theme - "The impact of the course on teachers' beliefs" reports on teachers' changing beliefs about their roles and those of students in learning and assessment while the second theme - "The impact of course experiences on teachers' self-efficacy beliefs" pays attention to the development of, and influences on, teachers' self efficacy beliefs related to AfL. While only one author carried out the coding and analysis of all data, two additional strategies were used to ensure the trustworthiness of the interpretations made. Firstly throughout the analysis phase we met regularly to debate and then confirm the meaning (definition) of particular codes. In the second instance the second author coded a sample of randomly selected extracts, and any data identified as 'puzzling'. In these ways a common and agreed upon interpretation of data was reached.

Findings

The Impact of the Course on Teachers' Beliefs

One of the most significant shifts to teachers' beliefs was in relation to the roles that teachers and students play in AfL and the responsibilities attached to those roles. At the beginning of the course teachers believed that the teacher's role was the most important in AfL given that students' learning was supported and furthered through teachers' use of assessment information to inform program planning and teaching. This in turn meant teachers were in a position to *"improve achievement outcomes"* (T.18). Overall, students were regarded as recipients of information as the teacher told them *"where they are at, where to go next, and how to get there"* (T.2).

Post-course, the role of the teacher was viewed differently. Teacher dominated approaches to learning were rejected as learning was seen as a collaborative venture. Teachers believed that "sitting beside learners" (T.15) or "walking alongside" (T.18) students, taking a close interest in what they say and do was a critical aspect of their role. They acknowledged that they needed to be in a position to "notice, recognize and respond" to student learning (T.8) 'in the moment', as learning was happening. Post-course, students were characterized as "insiders [who] take responsibility for their learning" (T.10).

Significantly, AfL was no longer seen as something that could be achieved through adding single strategies to an existing program, rather its essence or spirit needed to

permeate the teaching-learning environment. If this was to occur teachers believed that students needed to take on a new identity - to become *self-regulating learners and to take responsibility for their learning*" (T.7).

Seemingly, experiencing AfL from a learner's perspective, as well as observing the course lecturer who had taken on the role of an AfL teacher, heightened teachers' awareness of their personal approaches to learning. This heightened awareness also shed doubt on the effectiveness of some of these approaches and prompted thinking about what changes might need to be made. As Teacher 15 recalled:

"The combined experiences carefully selected and modeled by our lecturer have led me to think consciously about how I have approached learning previously and what I need to do to effect changes."

In turn, this awareness was seemingly a catalyst for teachers to examine their beliefs about what constitutes effective learning. One of greatest insights teachers gained from immersion in an AfL environment was the need for learners to take a more "participatory role so they have a level / degree of control over their learning" (T.6). Furthermore, effective learning necessitated that students be "leading and active" (T.15) in each strategy associated with AfL. Whilst in retrospect the need to be an active and engaged learner was seen as critical, at the beginning of the course the expectation that teachers would become active learners proved to be an "uncomfortable" experience for some. As Teacher 16 explained, initially there was some resistance on her part to engage. It was only over time when she was "more at ease with the process" that she became an "active and willing participant" (T.16).

At course completion many teachers made reference to the critical role peers play in supporting learning. Teacher 7, like a number of her teacher-peers, revealed that prior to the course she had "no understanding of collaboration and co-construction with peers" or how such interactions could "improve learning". Teachers' prior experiences had seen them "often working alone" (T.17). Hence they had not "appreciated the importance of dialogue" (T.17) in "helping them to grapple with concepts and identify different perspectives" (T.18). Neither had they recognized how peer response and feedback (T.5) could help them monitor and improve the quality of their work. Teacher 16 spoke at some length about how her participation in peer feedback during the course "had made a huge difference" to her learning. Teacher 20 made specific mention of the way in which regular peer feedback enabled her "to close the gap between what was expected and what I had already achieved." It also assisted in the setting of "new more achievable goals."

While teachers' ongoing participation in peer response and review activities led them to the realization that there were positive benefits accruing to them as learners, initially some felt daunted by engagement in such a process. There was a perceived lack of confidence in their "ability to assess other people's work" and hence they were hesitant to "provide feedback to others" (T17). Some teachers acknowledged feelings of vulnerability in that they did not want to be seen as "being wrong or showing I don't understand, thus admitting I don't belong or I had failed" (T.16). However, several components of the learning environment seemed to mitigate teachers' initial fears. Firstly, working in an "open trusting, collaborative environment" (T.13) that fostered a "genuine learning partnership"(T.2) between the lecturer and students and among students was seen as critical. Working in such an environment helped teachers to realize that disclosure of misconceptions and misunderstandings was a "strength in [the] learning processes instead of an indication of failure or lack of ability" (T15). Secondly teachers' participation in a range of activities resulted in '... a continual building ... of knowledge' (T.14) culminating in the attainment of an informed and '... far more theoretical understanding' (T.3). An increase in knowledge worked to build teachers' confidence to the extent participation in peer review became an

exciting and motivating experience. Teacher 16 who had at first been a reluctant participant declared:

"It was an exciting experience for me to discuss what someone else had written or included and being able to say 'I like how you put that' or 'the quote you used was really pertinent'. Even more motivating when looking at one example I felt able to say 'I don't agree with what you said here ... I think you should have explained it further' or 'use this quote its more to the point'"

The experience of being both a peer reviewer and recipient of peer feedback provided teachers with insights into how students in the classroom might feel:

"..., I can see the value of [peer review and feedback] ... this [how I am feeling] is how kids feel ... I can see that adults sort of process things differently but I can see that it would be the same with kids ..." (T.15).

The Impact of Course Experiences on Teachers' Self-Efficacy Beliefs

As the course progressed teachers realized that author was deliberately integrating AfL strategies into each session. From their perspectives the experience of being an AfL learner brought to life the innate strategies that comprise AfL:

"A key thing really was that we were actually using AfL processes in our own learning so for us to be learning about it wasn't just theory ... We were actually practicing those skills in class so for example when we were talking about the essay that we would actually work in AfL ways ... we would sit down and look at exemplars ... then breaking those down and talking ... in small groups – we discussed what was good about this and ... then go away and have a go at writing a bit, drafting ourselves and bringing that back to discuss. So I think actually working through the AfL processes ourselves helped to bring that understanding ... I think she practices what we're learning about really so the principles that we are learning about in class are what we are actually practicing in the course ... I think it makes it easier to understand what you are actually learning about because it's part and parcel of what you are doing in each class ... rather than just being all theory, that you actually knew what it was all about because you were participating [in it] ... " (T.12).

Teachers also appreciated that author "... *discusses it [her practice] with the class*" (T.14). As a consequence, they felt they knew "*what we were doing and why we were doing [it]* ..." (T.2).

Experiencing AfL precipitated reflection on teachers' own practice. In some cases, aspects of practice were confirmed, in other cases lecturer modeling, and/or participation in an activity underscored areas for improvement, for example, one teacher indicated "modeling ... highlighted for me parts of my program I probably don't do well enough so my next step with [students is] ... reflective questions and getting them to discuss the learning" (T.5). Another could "[hear [my] own voice ... going 'ok, I used to do that, don't do it, you can do better" (T.16). For others, experiences prompted reflection on "[how] you would structure a classroom so that learners were giving feedback to other people" (T.14), and provoked the realization that " ... in the classroom [the teacher isn't] the only 'go to' person because your peers then become your 'go to' people" (T.15).

Teachers who were teaching full time spoke about how they were already 'tweaking' aspects of practice, while those on study leave¹ talked about how excited they were to be returning to the classroom when they would have an opportunity to put their new understanding of AfL into practice. Teacher 7 for example felt a responsibility to "get it right ... because I feel I have been doing [the students] a dis-service" – I "[can] not wait to get back to [the] classroom ... to implement AfL". Alongside this excitement was a recognition that implementation would be "the biggest challenge ... making sure all those components [of AfL] are part of your classroom ..." (T.7).

Experiencing AfL "increase[d] [the] desire" of Teacher 13 "to trial, experiment and take risks and give it a go and see what happens." Teachers were aware of the magnitude of the task and they acknowledged implementation was demanding and daunting:

"I am really nervous, a big step" (T.1);

"AfL, realistically I think a lot of teachers would struggle with it ... it's quite hard to build that idea of creating self-regulating [learners] ... taking some risks and trying the strategies [of AFL] will need some thinking through." (T.17).

Despite some trepidation and recognition of the complexities ahead, the end goal of implementation made it all worthwhile because "... *[as a learner] you're engaged and it has value*" (T.8). As Teacher 16 explained:

"I [have now] thought about this ... for a long time ... the more I practiced and developed the skills of AfL within myself being in the role of the learner, I concluded why would anyone settle for anything less." (T.16).

As a result of their experiences, teachers felt "*empowered and excited about the potential*" (T.15) of AfL to assist their students in becoming self-regulated learners – it had worked for them as learners, and they could see how its benefits in terms of learning and how it could work in their classrooms, with their students:

"I can see the benefits of getting kids to be self-regulating learners ... to inspire that love of learning – see themselves as a learner and want to be able to monitor themselves..." (T.5);

"[*AfL*] is creating life-long learners, this is giving kids autonomy to drive their own learning in the future ...[it can have a big] impact on kid's learning ..." (T.15).

Discussion

While it is recognized that teachers' beliefs influence practice, conversely in relation to AfL implementation, "*teachers' beliefs about learning have received too little attention in the rush to implement … a strategy of high leverage*" (Marshall & Wiliam, 2005, p. 166). Subsequently, there have been calls for those who run teacher professional development programs to devote considerable time encouraging teachers to examine their deep-seated beliefs and values (James & Pedder, 2006). Based on the research evidence presented here we believe that an experiential approach to teacher learning about AfL was effective in supporting teachers' examination of their beliefs about learning (and teaching) in an authentic and non-threatening manner. Prawat (1992) has argued that dissatisfaction with existing beliefs is a pre-cursor to belief change. In the current study, teacher engagement as learners in an 'AfL classroom' brought to the fore their existing beliefs about learning.

¹ In NZ, there is a contestable fund available which teachers can apply for to enable them to get paid study leave to complete a tertiary qualification. If successful, teachers can be released from their teaching duties for up to 32 weeks of a school year. A small number of teachers in the project were on paid study leave to complete their degree.

Seemingly teachers' experience of AfL from a learner's perspective prompted reflection on personal learning approaches and strategies. Such reflection led them to question the fidelity of their existing beliefs about effective learning. Ostensibly dissatisfaction with their existing beliefs arose out of their experience as learners, not their experience as teachers. To us, the power of the approach lay also in the fact that belief examination was not at the behest of the lecturer rather it became a natural activity borne out of current experience.

Comprising of two components, self-efficacy includes an efficacy expectation, which represents the belief in one's ability to perform the desired behavior and an outcome expectation, which relates to the belief that performance of the behavior will have a desirable effect. Thus, while protagonists of AfL, including those involved in professional development, may promote particular strategies and practices, it is unlikely that teachers will take these on board unless they have both a strong efficacy expectation - 'I can do this', **and** a robust outcome expectation – using these strategies and practices will lead to desirable outcomes (Bandura, 1977). We would argue that teachers' immersion in an AfL environment helped build both their efficacy and outcome expectations.

According to Bandura (1977) there are four main sources of efficacy belief: mastery experiences (enactive or performance accomplishment); vicarious experiences; social persuasion and an individual's physiological and emotional state. Of the four, mastery experiences "provide the most authentic evidence of whether one can muster whatever it takes to succeed" (Bandura, 1995, p. 3) and are thus more powerful in their effects. In the current study it would appear that teachers' positive yet challenging coursework experiences highlighted for them the beneficial effects of particular AfL practices in regard to the enhancement of **their** learning. Seemingly teachers' positive mastery experiences of specific AfL strategies supported commitment to attempt new ways of working within their classroom environments. The underlying message conveyed by the teachers was that the benefits accruing to themselves, as learners, became the impetus to make changes to the ways in which they were currently working with their students.

Individuals rely on their physiological and emotional states in judging their capabilities (Bandura 1995, p. 4). Positive emotional responses to the task in hand are likely to enhance self-efficacy beliefs, whereas negative emotional responses may weaken selfbelief. A deeper understanding of AfL has the potential to be disconcerting for teachers as they gain a fuller sense of the magnitude of the task of utilizing a range of inter-dependent strategies, which support active learning and learner self-regulation. Not surprisingly teachers in this study voiced some apprehension in regard to the task ahead of them. This feeling however was tempered by a sense of excitement and enthusiasm regarding the positive impact of specific strategies on learning. Whilst teachers' realistically voiced some self-doubt (Bandura, 1977) it was moderated by a strong sense of optimism in regard to what new ways of working could achieve. As a result teachers revealed strong aspirations to take on the role of the AfL teacher. It would appear that the strength of teachers' aspirations was affected by their positive engagement not only with specific AfL strategies but also with a lecturer who became, in their views, a credible and effective role model.

Vicarious experience in the form of social modeling is considered the second most influential way in which individuals' beliefs in their capabilities to master comparable activities can be strengthened. However, as Bandura (1977) has argued, overt modeling of desired behavior is insufficient on its own. Modeling must be accompanied by explanatory commentary that makes explicit a role model's covert thought processes and reasons for action. Evidence from this project suggests teachers paid attention to, and wanted to emulate, noteworthy facets of her practice, not only through author's effective modeling of the AfL teacher's role but also because of her ability to make "*her pedagogical reasoning for practice clear, explicit and understandable*" (Korthagen et al., 2006, p. 1036).

A Final Note and Looking to the Future

Experiential learning has been described as learning through reflection on doing (Kolb, 1984) and is considered a potent way in which new knowledge understandings and attitudes can be created (Boud, 1994). In the current study, teachers ascribed considerable value to their immersion in a complex vision of AfL as this immersion created substantial opportunities for them to learn by 'doing and reflecting on that doing'. As Teacher Educators we believe that together, these two components of experiential learning had a significant impact in relation to uncovering and challenging teachers' beliefs. Arguably, teachers lived experiences of AfL provided them with a compelling argument for change as well as a concomitant vision for practice.

Although the current study is small-scale in nature (and thus the findings must be treated cautiously), it would seem that these findings provide some valuable insights for teacher educators and those who offer professional learning opportunities for teachers. Too often AfL professional development is delivered in a didactic manner, focused on the development of teachers' content and pedagogical content knowledge. Commonly, 'expert others' suggest procedural changes to practice such as the addition of individual Afl strategies to existing programmes (James & Pedder, 2006). However such changes are insufficient on their own to support effective implementation of AfL into classrooms, as they do not engage teachers in a consideration of the deep and fundamental changes needed to enact AfL in a way that will empower learners. Nor do they offer teachers a vision of AfL in its fullest expression. We would argue that an experiential approach to learning about AfL, where teachers are deeply engaged in the particulars of learning and teaching, analyse and reflect on their own learning, not only has the potential to create dissonance with teachers regarding their current positioning in AfL but also enables them to reposition or reconstruct their current beliefs. Looking to the future, we would recommend an experiential approach as a way to support teacher professional learning about AfL.

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