



Reinventing Professional Learning and Development: Ensuring Relevance and Building Resilience

Hazel Owen, Ethos Consultancy NZ

Abstract

Innovation may best be considered as reinvention rather than invention. This observation is supported by a gradually accelerating change in *how* professional learning and development (PLD) for education practitioners and leaders is being offered, designed, facilitated, and evaluated. The reinvention of PLD includes shifts towards contextualised, personalised, self-paced learning that build resilience because they are underpinned by the development of a professional social identity within an online community of practice—shifts that arguably challenge notions of what actually comprises PLD provision.

However, what might such reinvented PLD ‘look like’? And what are the implications for professional practice and student learning in terms of building resilience, ensuring relevance, and driving reform? This paper provides an insight into the features of, and findings from, the Virtual Professional Learning and Development (VPLD) programme initiated by the New Zealand Ministry of Education in 2010. The providers have worked mainly with primary and secondary school leaders and teachers, although one tertiary teacher has participated. The VPLD has been designed to exploit a range of affordances that in turn provide flexibility of choice, time, and approach for participants, enabling them to build and shape their knowledge and skills, all within the framework of mentoring and an online community of practice (CoP).

This paper illustrates some of the dynamics and possible results of the VPLD programme by presenting two vignettes (in part drawn from the associated research study), along with other illustrative data. The vignettes and following discussion clearly indicate the value of the VPLD model by demonstrating changes in the practitioners’ roles which have resulted in, for example, increases in the development of students’ metacognitive skills. There is also anecdotal evidence of improvements in student achievement of learning outcomes.

Keywords: professional learning and development; e-learning; personalised learning; virtual learning; online communities of practice; professional change; online communities

Introduction

Professional development for education practitioners, in the New Zealand context as well as elsewhere, is gradually being reshaped to reflect that learning is a social phenomenon (Ham & Davey, 2008). Shifts toward more relevant, contextualised, personalised, self-paced learning, which builds resilience because it is underpinned by the development of an online professional social identity, are arguably challenging notions of what actually comprises professional learning

and development (PLD). Reform is therefore not a simple process—it requires a wider understanding of what PLD *should* be and what it *should* provide (Stoll, 2004).

The Virtual Professional Learning and Development (VPLD) initiative was instigated in October 2009 by the New Zealand Ministry of Education, which also funded the project. The VPLD model and approach was piloted and evaluated in 2010 with 10 teachers from the tertiary, secondary, and primary sectors. The findings from the pilot indicated that, when professional learning was situated within the practitioner's context, and with complementary, easily accessible opportunities for sharing practice within an online community of practice (CoP), participants demonstrated high levels of engagement, as well as changes in their own teaching practice.

The VPLD programme was subsequently rolled out in 2011 with a total of 20 teachers and principals (including eight participants who continued from 2010). Participants for both 2010 and 2011 were from a variety of New Zealand locations, a range of disciplines, and diverse backgrounds, ethnicities, and cultures. This paper presents some of the findings from the research conducted alongside the pilot and the roll-out.

Literature review/theoretical framework

While there has been great progress in the fields of neuroscience and educational psychology, it is still not known how human minds create, store, retrieve, and apply knowledge. It is hypothesised, however, that the context in which knowledge development occurs affects how, or if, it is applied in other situations and settings (see, e.g., Lave, 1997). For example, Carraher, Carraher, and Schliemann (1985) found that a trader could perform complex calculations while trading on the street, but was not able to perform the same calculations in a formal education setting. It can therefore be postulated that an education practitioner's professional knowledge cannot be separated from their domains and contexts (Cranefield, Yoong, & Huff, 2011), beliefs about learning and teaching (Cranefield, Yoong, & Huff, 2011), interpretive frameworks (Richardson & Placier, 2001), and routines and practices (Handal, 2004).

A practitioner's work context will include history, customs, rituals, and narratives that help define their education community and learning experiences (Shea, Pickett, & Pelz, 2004). Contextualised PLD that recognises the sociocultural considerations of learning has been reported to also have a positive effect on student learning outcomes, partly because there is a direct connection between principles of effective teaching practices, recognition of relevance, and consequent adaptation of those practices to local circumstances (Timperley, 2008). When PLD is situated, educators are more likely to apply strategies to address known issues concerning student learning in their specific learning community (Timperley et al, 2007), while also actively engaging in the exploration, development, and application of conceptual frameworks that encourage consideration of their students in a new light (Timperley, Wilson, Barrar, & Fung, 2007).

Stoll (2004) suggests that PLD might take the form of participation in professional learning communities and learning networks, which in turn can help practitioners build resilience in the face of adversity (Patterson, Collins, & Abbott, 2004). Enabling practitioners to build relationships and deepen identity within a community can help them remain positive, flexible, focused on what they care about, able to take on leadership roles, and able to “maintain high expectations for success for students, teachers and parents” (Patterson, Collins, & Abbott, 2004, p. 3). Frequently referred to in formal education contexts, the CoP—a theory developed in the latter half of the 1980s and in the 1990s by Lave and Wenger, and since extended (by, e.g., Hildreth, Kimble, & Wright, 2000)—encompasses the notion of ‘situated learning’, whereby practitioners construct meanings collectively in a community (Wenger, 1998). When CoPs are an

integral part of PLD they can provide formal and informal learning opportunities, as well as a space for practitioners to participate in conversations about learning and teaching, and share practices (Brown & Duguid, 2000).

Online CoPs build on the definition and practices of those developed face to face, although they are necessarily distinguished by the fact that communication and collaboration is through computer-mediated communication (CMC). There is a wide range of definitions for online CoPs, but most include notions of a group of people who, in a common space on the internet, engage in public discussions, interactions, and information exchanges (Tilley, Bruce, Hallam, & Hills, 2006). Lai, Pratt, Anderson, and Stiger (2006) define the unique characteristics of an online CoP as: (a) top-down in design; (b) taking longer to develop; (c) comprising members who usually do not know each other before they join; (d) having leaders who are recruited rather than emerging from the community; and (e) requiring some form of technological support to help ensure its survival. Ashe and Bibi (2011) suggest that these online spaces have the potential to create complementary contexts for learning, whereby a member of an online CoP can build capability through “focused, purposeful, and immediately useful conversations, resources and support” (Flagg & Ayling, 2011, p. 387)—all factors that can build toward reform.

Key considerations for the design of PLD that are likely to have an effect on an education practitioner’s philosophies, beliefs, identity, and role include PLD that is:

- integrated with what an educator is already doing, and builds on existing roles and daily routines (Stoll et al., 2005)
- open for educators to choose their focus, outcomes, and modes of working (Owen, 2011)
- focused on iterative cycles of reflection and evaluation
- contextualised and applied
- flexible enough to enable customisation for an educator’s own context, and for participants to select interactions and resources that suit cultural preferences (JISC, 2009)
- provided in frequent short bursts over an extended duration (3 years or more) (Shea, Pickett, & Li, 2005)
- supportive, with shared leadership (Goodyear, 2005)
- built within a CoP/mentor relationship that has a foundation of trust, compatible interpretative frameworks, shared practice, collaboration, experiences, skills, values, and vision—framed in ways that challenge assumptions and create formative cognitive dissonance (Festinger, 1957)
- inclusive, but looks beyond each individual’s context for further sources of professional learning (Wenger, 1998).

Description of the VPLD programme

The VPLD programme, informed in part by the factors identified earlier, has no formal ‘content’—the programme offers a customisable PLD experience in which there are multiple ways to participate. The programme runs over 3 years—in the first 2 years education practitioners and leaders work on projects that interest them, driven by their own investigation and based on the needs of their students and school community. In the third year, participants focus on transitioning into a mentor role, where they choose and work with a fellow practitioner but can also choose to continue work on their original project. The PLD itself is subsumed within the participant’s function of being part of their own school’s/institution’s community and context (see Figure 1), rather than being the central focus, as can happen with more traditional approaches to PLD. The elements identified within the figure are covered in the discussion that follows.

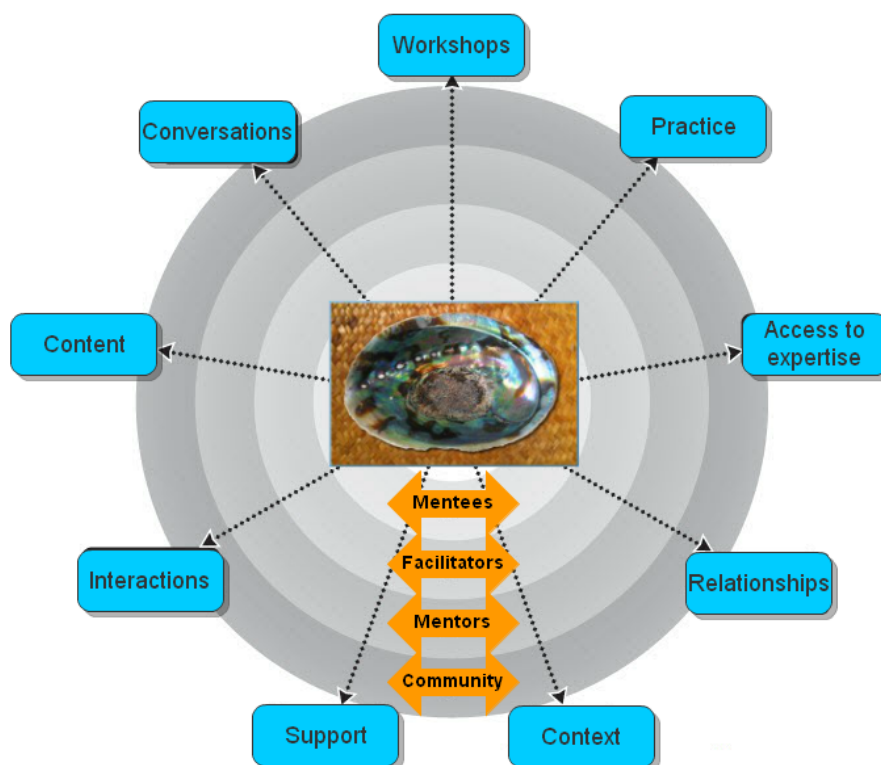


Figure 1 Components of the VPLD programme, which meets diverse requirements and interests of participants (adapted from Wenger, White & Smith, 2009)¹

The VPLD programme has three main online spaces: (1) the online CoP (Ning); (2) a ‘sandpit’ area and access to self-paced resources (Moodle); and (3) Adobe Connect (a web-conferencing tool that enables interactive synchronous communication). The VPLD online CoP is an active space, with over a hundred members. It offers a safe environment in which practitioners can discuss and challenge theories, views about pedagogy, and practice—an aspect that appears to be enhanced by the participants’ eclectic combination of disciplines and sectors. Social structures (including agreements about interactions, processes, norms, and rules) are negotiated on an ongoing basis.

A variety of community building strategies are employed, such as sending out a monthly e-newsletter that highlights conversations and contributions in the online CoP, as well as showcasing the work of community members and celebrating successes. There are also all-community web-conferencing sessions to mark, for example, the end of the year—during which participants may reflect on their experiences—or have a specific pedagogical and/or skills focus.

Each participant is partnered with a mentor whom they meet online, with Adobe Connect or Skype, once a month for between 45 and 90 minutes. Mentoring strategies are customised to suit the needs of both the mentee and the mentor, and during monthly meetings a variety of subjects are discussed, including pedagogy, what the participant has been working on with their students in terms of changes to their teaching practice, and how their students have reacted. The

¹ The picture at the centre of Figure 1 is a paua shell that was given as a gift by one of the participants during the third face-to-face hui, on the background of a kete. The paua shell conveys lifelong effort, adding layer upon layer in the process of learning, each part showing a different hue and blend. The kete represents a container of knowledge and wisdom, as well as, via the woven strands, notions of unity and togetherness—that is, a community working together.

participant also identifies areas in which they need support, and plans ‘next steps’ and interim goals. Currently three mentors are employed as paid facilitators within the VPLD project.

An integrated model of virtual professional development that relies on learning and working collaboratively is likely to be enhanced by a face-to-face meeting where possible (Owen, 2011). In part this provides an opportunity to establish working relationships (Milligan, 1999), and is especially useful as an aid to social cohesion, especially if educators are unfamiliar with participating in an online community and/or with CMC (Owen, 2011). As part of the VPLD 2010 trial there were two face-to-face meetings whereas, in 2011, due to growing numbers and limited funding, there was only one.

Methodology

Since its inception, the VPLD programme has been underpinned by a research focus which serves an iterative feed-forward function as well as providing outcomes and comparative longitudinal evaluation data. Data has been collected from all areas of the VPLD online CoP, from project documents, recorded discussions, and notes from mentor meetings, and from webinar sessions, as well as from three online surveys per year in 2010 and 2011 (conducted in January, June, and November/December).

The study focused on evaluating the design of the VPLD. The main questions underpinning this study included:

- How does working with a mentor affect participants’ opinions about their own efficacy and teaching practice?
- What are the observed effects on participants over the course of the VPLD programme?
- What are participants’ opinions about the effects of shifts in their teaching practice on their students’ achievement and engagement?

Results: stories of change

Complementary to, and drawing data from, the overarching research study, four stories of change have been developed. The aim was to enable close inspection of possible embedding of new professional knowledge, practice, and beliefs, as well as an exploration of how the participants constructed their knowledge and made sense of their learning. The stories of change are not exhaustive—they represent the trends that have been observed across the VPLD programme. Due to space limitations, only two of these stories of change are summarised below. The examples have been chosen to illustrate primary and secondary sectors in different locations in New Zealand and across disciplines. As far as possible, the practitioners’ own words are used, but names and identifying features have been changed to preserve anonymity.

Story of change: Melanie

Background/description: Melanie is the assistant principal of a secondary school in New Zealand, where she also teaches Horticulture. Over 60 percent of the students are of Māori extraction. While participating in the VPLD programme, which she joined in May 2011, Melanie was also completing a qualification in Information Technology for teachers.

Focus: One main issue for education providers in New Zealand is that there is “a group of students, many of whom are Māori, Pasifika or who have special education needs, who are not succeeding and for whom the system is not delivering” (Ministry of Education, 2010, p. 24). This story of change involves Melanie’s Level 1 Horticulture class, and her focus on improving “Māori engagement so that it leads to improved Māori achievement in my classes” (goal-setting document), as well as moving forward in her leadership role.

What happened? (Process and results): Melanie began by working with her mentor to identify her needs and to set goals for 2011. One consideration she identified was:

It is unknown if IT [information technology] will increase engagement but inquiry learning certainly will (goal-setting document).

She formulated a plan and then quickly started to implement it, participating in ‘just-in-time’ PLD, as well as formal PLD sessions targeted to help with, for example, Māori achieving as Māori, and posting reflections within the online community. At the face-to-face hui in June, Melanie facilitated a session for the participants on enquiry learning based on the SAUCE model developed by Trevor Bond. During the session she described some of her reasons for, and experiences of, using this approach with students. She also indicated that she wanted to further develop culturally responsive learning experiences, and felt that e-learning might offer a complementary aspect to the SAUCE model that would help to achieve this aim. Melanie was particularly interested in providing flexible structures and opportunities that would focus on the learners, motivate them, be designed for inclusivity and, ultimately, create a sense of belonging. She also recognised that the needs of her students (including academic, personal, social, and whānau needs) were driving the desire to trial alternative approaches (video recording).

In July, Melanie observed:

I have learnt so much—feel the pressure of TIME to try things out . . . [prioritise] the time you spend on PLD as to whether it is meeting your goals . . . Done a lot of . . . [prioritising], [and made a] lot of progress with kids (mentor conversation).

Melanie reported that:

I am having a real blast with . . . my students at school . . . I have groups working on preparing documents collaboratively from which they can study for their exams . . . It is a great way for them to see something that they have made, and be able to use it for revision . . . The students were *instantly engaged* [original emphasis] with the fact that there was a chat facility, even one with their teacher looking in on it . . . (reflective post).

This is how I did it. First I made a SAUCE inquiry sheet that they worked on by themselves. Once they had spent a couple of periods on that I introduced them to google [sic] docs and asked them to answer the same questions in the same format but all make sure that their ideas were . . . there . . . Those students who hadn’t done much originally or didn’t know what to do were instantly buoyed by the idea that they could contribute even on a small scale (reflective post).

One student chatted to me that she didn’t know what to do and I asked her for the definition, she put it in chat quite happily and when I replied, that’s a really good definition, she posted it onto the group document. It really gave her the confidence to help out and her knowledge has grown so much now (reflective post).

By August, Melanie was extending her practice from using individual tasks and tools to starting to fully integrate the ICT-enhanced enquiry learning approach into the curriculum. Her students continued to be engaged, and she received positive feedback:

I was trying to think of a fun way to start a new unit of work on plant husbandry for my NCEA Level 1 class and not having much luck on thinking of anything innovative. I decided to stick with the . . . SAUCE model and started out trying to find youtubes [sic] . . . I came across one that was peppered with mistakes. I . . . decided to make that one the video . . . the ‘setting of the scene’ was to ask the students to identify as many mistakes as they could. Well, students love to see others make mistakes. They then had to chose [sic], in pairs, one aspect of plant processes and make a two minute youtube ready to upload. INSTANT engagement, instant acquiring of knowledge required, using their knowledge [to

create] . . . their scripts for the youtubes (not wanting to make mistakes like the original) and they are now ready to upload their videos (reflective post).

Instructions are all delivered through our Moodle so if students are away, or want to work at home, they can (follow-up comment to original post).

Student feedback was mainly positive, and Melanie reports that:

one of my students yesterday quietly told me he was so pleased I had introduced him to igoogle, said it really helped him organise his life with the calendar and gmail (blog post).

Melanie followed up with the comment that:

I find that in Horticulture the new internal achievement standards at Level 1 are quite suited to inquiry learning . . . I am giving the students a lot more choice about what they study . . . It gives them a better understanding (blog post).

September saw Melanie working through the final stages of reflection and evaluation. She indicated that the results to date have helped convince another teacher at her school to start working with a blended learning approach—something that was termed the ‘ripple effect’ by the VPLD community.

By October Melanie was working across several communities within the wider education community, sharing her own practice and experiences, as well as collaborating with, and learning from, others:

Been amazing to hear from other teachers—e.g. at Hort PD day . . . Melanie sharing resources & planning to skype between two classes (mentor notes).

She reported that a blended enquiry learning approach:

seems to have a positive result on . . . senior exam results . . . 7/8 passed—usually only 50% pass rate (mentor notes).

The students were also invited to provide feedback about their own experiences through an evaluative survey in which:

most scored highly for enjoyment (5), one scored very good (4) & another scored good (3)—Range 1–5; kids have enjoyed it . . . Students are constructing their own understandings and so know their stuff, rather than regurgitate someone else’s information (mentor notes).

Melanie’s final reflections, posted in November, revealed a shift in her own professional identity and practice, as well as the influence she was having across her own context and beyond:

The best thing I did all year was join the VPLD group . . . The ripple effect from that one decision has been AMAZING! I have tried all sorts of interesting and varied things in the class during the year . . . I am still constantly amazed when I see and hear that teachers around the country have not moved into a more student centred approach . . . (reflective post).

It hasn’t always been perfect, but I have shared my trials with staff and many of them have taken ideas onboard and tried out stuff they haven’t used before” (reflective post).

Story of change: Mike

Background/description: Mike, who joined the VPLD programme in January 2010, is a deputy principal. He also teaches reading, writing, mathematics, and physical education to students in

years 6, 7, and 8 at a primary school. This specific story of change draws on Mike's learning journey over 2 years.

Focus: Education providers in New Zealand have a strong focus on helping to build robust student literacy skills in primary schools that “ensure students are more engaged with school, and succeed across the entire curriculum throughout their schooling and tertiary education” (Ministry of Education, 2010, p. 14). This story of change maps Mike's maturation of strategies to help his students build their literacy skills.

What happened? (Process and results): When Mike started the programme in 2010 he was trialling an enquiry learning approach with students, as well as using blended learning.

Mike is trying to get parents and the community involved . . . Mike's students work on a variety of projects and tasks, and . . . when they create something exceptional it is celebrated by being included in the class blog (blog post).

However, Mike initially needed support to develop his critical self-reflection skills, and he sometimes seemed to be distracted by the tools rather than working out why some of his students were not engaging. Through interaction with the online CoP members and working with a mentor, Mike started to really reflect on and deconstruct his own role and those of his students. He explained:

I find it really good to sit down and to actually just talk about [pedagogy and practice] . . . and as . . . [we] are talking it kind of prompts me to think of things (mentor meeting transcript).

By October 2010 Mike's mentor noted that he started to refine:

what he is doing in reading groups . . . It was great to . . . discuss other strategies such as introducing skills incrementally rather than trying to cover all the skills for each aspect of the units to enable . . . students . . . to cover things more thoroughly (mentor notes).

Mike's mentor also indicated that he was:

going to be thinking a lot more about what he is going to be doing . . . and how his change in views will impact what he wants to do/plan for next year. Had a great discussion of technology for the sake of technology versus student engagement and motivation, meeting a range of learning preferences (mentor notes).

Two of the main goals that Mike identified for 2011 were:

[to develop] a collaborative working environment for students. Students become self-managing and independent in their learning (goal-setting document).

During March he and his mentor were discussing:

student expectations . . . as well as his expectations as a teacher especially around the independence of his students (mentor notes).

In June, Mike had something of an epiphany. He said he now realised it was not:

so much about gaining new gizmos to try out or to find things to use in the classroom, but to engage with other teachers who are willing to change their [practice] to make them better teachers—and in turn improve engagement and achievement of their students (face-to-face hui).

And in July, Mike commented:

The revelation for me is that it has me thinking about how I actually use google docs, which is more as a data gathering tool or work book . . . I [want to] use it for more of the collaborative work that it is probably designed to do (reflective post).

Mike also started to look at ways to collaborate with other teachers.

You need to have a common curricula link and someone to work with that you know well . . . good opportunity to develop new working relationships with others (mentor notes).

In August 2011 Mike was:

thinking about whether the common teaching [practices] that we employ are the best for [individualised] teaching. I am thinking of employing a technique where I might teach a broad concept to a larger group of students . . . The difference here being that there is movement away from having reading groups where the students know which one is the “smart” group and the “dumb” group . . . Students will still be getting their mileage from the reading topics and it gives time to pull students out and work more one-on-one rather than filling the day with reading group after reading group . . . Also using you tube and videos . . . to further engage students. This would be followed up by research activities, thick and thin questions, blooms [sic] etc. Thinking about Inquiry—starting with a much bigger picture that will allow students to hone into a wider range of individual/group inquiry (reflective post).

In September 2011 Mike trialled his idea for:

mixed ability reading groups with half of the class doing Current Events. Other more able kids doing a novel study. Some direct instruction . . . Track what they are doing & see who is having difficulties to pull out for more teaching. This has been hard as a lot of time is taken up in instructional phase (reflective post).

Through reflection and experience, Mike returned to revisit the blogs he had used with students in 2010, and in October 2011 he talked about:

moving away from WOW (work of the week) to more documentation of the students’ learning in general. Instead of picking one thing they are most proud of, write about a range of things—like a learning map, not restricted to once a week. Use as a resource to revisit—share as a class, randomly pick 2 or 3 to analyse together—group reflection. Blogs are their ePortfolios (mentor notes).

Student feedback was positive and in October Mike reported that:

the kids really get into it, always something to share & asking lots of questions, always go over the scheduled time (mentor notes).

Mike concluded that he felt that his shifts in role and practice had provided his students with:

the opportunity to take ownership of their learning. They are [focused] and attentive (blog post).

Synthesis

An analysis of these two vignettes suggests that the individuals who participated in the VPLD developed a sense of self-efficacy that motivated them to trial alternative approaches, and to initiate iterative cycles of trial, error, and improvement. The two participants’ belief that they could attain a certain set of goals was reinforced when they shared their experiences within the

intellectual construct of the VPLD community (which included their mentor), and where their endeavours and trials with different strategies were recognised, acknowledged, questioned, and developed. The process of sharing also resulted in gains in knowledge and skills (initially an integrative process where different types of knowledge intersected). However, with further trialling, and development of their identity as practitioners and contributing members of the VPLD community (Mayo & Macalister, 2004), the process proved transformative, resulting in new synthesised forms of knowledge (Graham, 2011).

Community and practice were found to be of equal importance in reshaping professional identity and knowledge, but for different reasons. The community provided the forum to ask for advice, as well as for robust, healthy conversations about theory and practice (Hung & Chen, 2001), alongside offers of resources and knowledge/practical assistance. The situated practice (which included reflection and personal enquiry) provided opportunities for the participants to talk with colleagues, seek feedback from students, and tweak their approaches. The resulting reshaping of roles appears to have had an effect on student engagement as well as motivation, especially where the artefacts produced were accessed and critiqued by their peers and community.

Discussion

The three key themes of resilience, relevance, and reform provide a useful lens through which to further explore the implications of offering PLD that was shaped with the VPLD model.

Resilience

Participation in the VPLD offers members of the online community opportunities to collaborate and, in the process, build relationships and deepen their identity, helping them to deal with uncertainty and cope with change. The strengthening of identity and the feeling of socially mediated, shared understandings and experiences can help to reduce the sense of isolation, and strengthen resilience in the face of change.

It might also be argued that the VPLD programme not only increases people's ability to cope with change, but also helps participants develop strategies to *celebrate* and *embrace* change. In a safe, supportive environment participants have enthusiastically trialled and evaluated new approaches:

We have had time to try our ideas, to make our mistakes and to reflect upon our success. An overall atmosphere of confidence has given some much-needed direction (survey response, 2010).

When events were not as successful as they might have hoped, a shared online reflective blog post often elicited responses of empathy, suggestions of how frustrating problems might be handled, and offers of help. Working with a mentor was also identified as a key aspect of developing resilience.

Relevance

As described earlier in the paper, the VPLD model uses approaches to PLD that exploit the affordances of the virtual nature of the programme. As such, the participant does not have to be physically present at scheduled sessions. The practitioner can tailor their participation to their ongoing work commitments, and the fact that professional development is couched within their own context means that it is more likely to be relevant to their daily concerns (Willis, 2000).

The results, as illustrated by the two stories of change, indicate two key factors. The first is that, by being immersed in an experience that models aspects such as valuing existing world views and skills, and making it okay to 'make mistakes' in a safe environment, participants were often encouraged to use such approaches with their own learners.

The second is that students have behaved positively; for example:

I see my students bouncing into the classroom, and where before they might be packed up and ready to go 10 minutes before the end of a lesson, now it's often tricky to get them to stop working!! (end-of-year reflection, 2011).

Theories of learning, teaching, and pedagogy were constantly revisited and discussed by participants. This led to the design of pedagogically informed blended programmes of learning that align with standards and curriculum requirements:

The progressive resolution of how to develop the middle-school math program to support the standards . . . at NCEA level, with corollary aims of enhancing the relevance of math to students' lives (survey response, 2010).

It enabled high levels of differentiation:

Introduced moodle [sic] into my classroom as an additional way for extending able students (end-of-year reflection, 2011)

It also enabled authentic learning opportunities, and raised awareness of the practical application of skills. Sessions, activities, and programmes were designed to be culturally responsive and take into consideration aspects such as accessibility (physical, technological, and geographical), while also being relevant to the wider community. Students became empowered co-constructors of outcomes and facilitators of sessions, as well as more confident, engaged learners who were:

empowered . . . to learn on their own terms (survey response, 2011).

Education practitioners also reported improvements in the achievement of learning outcomes, and in the assimilation/application of key competencies.

Reform

It is important to recognise the contributions made by “non-official brokers and opinion leaders” (Cranefield et al., 2011, p. 16) who were situated on the boundaries of the community. These brokers and opinion leaders, while not working directly with a VPLD mentor, were still active in the online CoP and played important roles in the community's cohesion. They also challenged participants to reach beyond their comfort zones. The combination of challenge and support is a fundamental precursor of moves toward reform. One participant commented that he saw this:

as the way of the future and the most accessible, available professional learning for these current times (survey response).

Another tendency that has been designed into the VPLD model, and that builds on the underpinning principles of reform, is the fostering of mentoring roles. Participants have been encouraged to mentor colleagues where the inclination and need exists. As a result, the VPLD team has noted ‘the ripple effect’, with participants working with between 100 and 200 colleagues each, in either a formal or informal PLD capacity. Bandura (1963) asserted that most learning is shaped by our experiences and we are likely to imitate, and in part replicate, what we have participated in—in the words of the oft-used cliché, ‘we teach as we have been taught’. The implication of this for VPLD participants working with colleagues—given the immersion into a learning experience that recognises each individual's political, social, economic, and personal drivers, while also embracing them in a community of practice—is that participants are likely to replicate these experiences, at least in part. This tendency may, in turn, have a significant effect on leadership and practice, and maybe on policy and the shape of education (including teacher education) in future years.

Conclusion

This paper has illustrated some of the dynamics and possible results of participating in the VPLD programme by presenting two vignettes and further illustrative data. When framed within the considerations of building resilience, ensuring relevance, and driving reform, it can be seen that the design of the VPLD programme provides scaffolded opportunities for learners (teachers and leaders) to develop their own capability (knowledge and practice), and to participate socially with other supportive education professionals while also (re)developing their identity as a member of the professional community (Lave & Wenger, 1991). In turn, the practitioners' learning and development in professional identity results in, for example, increases in the development of students' metacognitive skills, as well as anecdotal evidence of improvements in student achievement of learning outcomes.

While the design of the VPLD programme is unlikely to change the world, it is already building the resilience, confidence, and professional identity of those who participate. As such, this arguably fosters the enhanced potential of these educators to contribute to future reforms that will ensure education and PLD are reinvented to further serve the needs of learners and communities.

References

- Ashe, D., & Bibi, S. (2011). Unpacking TPACK and students' approaches to learning: Applying knowledge in pieces to higher education teaching and learning. In G. Williams, P. Statham, N. Brown, & B. Cleland (Eds.), *Changing demands, changing directions. Proceedings ascilite Hobart 2011* (pp. 128–132). Hobart, Australia: Ascilite.
- Bandura, A. (1963). The role of imitation in personality development. *Journal of Nursery Education*, 18(3), 207–215.
- Brown, J. S., & Duguid, P. (2000). *The social life of information*. Cambridge, MA: Harvard Business School Press.
- Carraher, T. N., Carraher, D. W., & Schliemann, A. D. (1985). Mathematics in the streets and in schools. *British Journal of Developmental Psychology*, 3(1), 21–29.
- Cranefield, J., Yoong, P., & Huff, S. (2011). Driving change through online brokering practices in an online community ecosystem. *Proceedings of PACIS 2011* (pp. 1–13). Brisbane, Australia: Queensland University of Technology.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Palo Alto, CA: Stanford University Press.
- Flagg, E., & Ayling, D. (2011). Teacher engagement in a Web 2.0 world: Developing your online teaching and learning community of practice. In G. Williams, P. Statham, N. Brown, & B. Cleland (Eds.), *Changing demands, changing directions. Proceedings ascilite Hobart 2011* (pp. 386–391). Hobart, Australia: Ascilite.
- Goodyear, P. (2005). Educational design and networked learning: Patterns, pattern languages and design practice. *Australasian Journal of Educational Technology*, 21(1), 82–101.
- Graham, C. R. (2011). Theoretical considerations for understanding technological pedagogical content knowledge (TPACK). *Computers & Education*, 57(3), 1953–1960.
- Ham, V., & Davey, R. (2008). "It's all about paying attention!" — But paying attention to what? Lessons learned about mentoring the self-studies of colleagues. *Proceedings of the seventh international conference on self-study in teacher education practices* (pp. 91–97). East Sussex, England: S-STEP.

- Handal, B. (2004). Teachers' instructional beliefs about integrating educational technology. *E-Journal of Instructional Science and Technology*, 17(1), 1–10.
- Hildreth, P., Kimble, C., & Wright P. (2000). Communities of practice in the distributed international environment. *Journal of Knowledge Management*, 4(1), 27–38.
- Hung, D. W. L., & Chen, D. (2001). Situated cognition, Vygotskian thought and learning from the communities of practice perspective: Implications for the design of web-based e-learning. *Educational Media International*, 38(1), 3–12.
- JISC. (2009). *Effective practice in a digital age: A guide to technology enhanced learning and teaching*. Retrieved from <http://www.jisc.ac.uk/practice>
- Lai, K. W., Pratt, K., Anderson, M., & Stiger, J. (2006). *Literature review and synthesis: Online communities of practice*. Retrieved from <http://www.educationcounts.govt.nz/publications/curriculum/5795>
- Lave, J. (1997). The culture of acquisition and the practice of understanding. In D. Kirshner & J. A. Whitson (Eds.), *Situated cognition: Social, semiotic, and psychological perspectives* (pp. 63–82). Mahwah, NJ: Erlbaum.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, England: Cambridge University Press.
- Mayo, E., & Macalister, R. (2004, March). *Communities of learners: Students learning while practising their skills*. Paper presented at the Annual Conference of the New Zealand Association for Cooperative Education, Christchurch, New Zealand.
- Milligan, C. (1999). *Delivering staff and professional development using virtual learning environments*. Edinburgh, Scotland: Heriot-Watt University.
- Ministry of Education. (2010). *Statement of intent 2010–2015*. Retrieved from <http://www.minedu.govt.nz/~media/MinEdu/Files/TheMinistry/2010StatementOfIntent.pdf>
- Owen, H. (2011). Facilitating online communities of practice as an integral part of effective professional learning. In J. Mackey, N. Dabner, N. Davis, & J. Johnson (Eds.), *Proceedings of ulearn 2011 research stream* (pp. 66–75). Christchurch, New Zealand: University of Canterbury School of Literacies and Arts in Education. Retrieved from http://ulearn.core-ed.org/sites/ulearn.core-ed.org/files/Ulearn_11_Conf_Proceedings_Web.pdf
- Patterson, J. H., Collins, L., & Abbott, G. (2004). A study of teacher resilience in urban schools. *Journal of Instructional Psychology*, 31(1), 3–11.
- Richardson, V., & Placier, P. (2001). Teacher change. In V. Richardson (Ed.), *Handbook of Research on Teaching* (4th ed., pp. 905–947). Washington, DC: American Educational Research Association.
- Shea, P., Pickett, A., & Li, C. (2005). Increasing access to higher education: A study of the diffusion of online teaching among 913 college faculty. *The International Review of Research in Open and Distance Learning*, 6(2), 1–8.

- Shea, P., Pickett, A., & Pelz, W. (2004). Enhancing student satisfaction through faculty development: The importance of teaching presence. In J. Bourne & J. Moore (Eds.), *Elements of quality online education: Into the mainstream* (pp. 39–59). Needham, MA: Sloan Center for Online Education.
- Stoll, L. (2004). *Developing professional learning communities: Messages for learning networks*. Retrieved from <http://plc.washington.org/cms/lib3/WA07001774/Centricity/Domain/42/developing-PLCs.pdf>
- Stoll, L., Bolam, R., McMahon, A., Thomas, S., Wallace, M., Greenwood, A., & Hawkey, K. (2005). *What is a professional learning community? A summary*. Retrieved from <http://networkedlearning.ncsl.org.uk/knowledge-base/programme-leaflets/professional-learning-communities/professional-learning-communities-04-summary.pdf>
- Tilley, C., Bruce, C., Hallam, G., & Hills, A. (2006). A model for a successful virtual community for people with long-term, severe, physical disabilities. *International Research: An international electronic journal*, 11(4).
- Timperley, H. (2008). *Teacher professional learning and development* (Educational Practice Series—18). Retrieved from http://www.ibe.unesco.org/fileadmin/user_upload/Publications/Educational_Practices/EdPractices_18.pdf
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). Teacher professional learning and development. *Best evidence synthesis iteration [BES]*. Retrieved from http://www.educationcounts.govt.nz/_data/assets/pdf_file/0017/16901/TPLandDBESentire.pdf
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, England: Cambridge University Press.
- Wenger, E., White, N., & Smith, J. (2009). *Digital habitats: Stewarding technology for communities*. Portland, OR: CPsquare.
- Willis, S. (2000). *Adult learning and the professional development of teachers* (unpublished paper prepared for the Education Review Office). Wellington, New Zealand: Victoria University.

Biographical notes

Hazel Owen

info@ethosconsultancy.com

Hazel Owen is an education consultant with interests in all aspects of ICT-enhanced learning and teaching, especially when underpinned by communities of practice and pedagogical strategies that scaffold and empower learners, while also fostering learner-led, culturally responsive, contextualised approaches.

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