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Making the most of mobility: virtual mentoring and education practitioner professional development

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Learning provision, including professional learning, needs to embrace mobility (of knowledge, cultures and contexts – physical and cerebral) to enable education practitioners to interact locally and globally, engage with new literacies, access rich contexts, and to question, co-construct and collaborate. Virtual mentoring, also known as distance, remote, tele-, cyber- and eMentoring, offers a level of flexibility that enables mentors and mentees to maximise these concepts of mobility. There are Professional Learning and Development (PLD) initiatives that offer contextualised, individualised learning experiences via mentoring partnerships and Communities of Practice (CoPs), but not so many that have focussed on *virtual* mentoring and *online* CoPs. This article describes a Virtual PLD programme that has been offered in Aotearoa New Zealand from 2009 to date and discusses findings from the associated research study, including benefits that can be specifically equated to the virtual nature of the mentoring and access to the online CoP. Also reported are shifts in mentees' self-efficacy and perceptions of changes in professional practice.

Keywords: online communities; professional development; coaching

1. Introduction

Learning provision, including professional learning, needs to change to embrace mobility (of knowledge, cultures and contexts – physical and cerebral). Such a change is not simple though because it requires broader understandings of what PLD *should* be and what it *should* provide. Research supports the idea that learning can be enhanced by using information and communications technologies (ICT), in particular, social networking tools that provide a heterogeneous system accessible through a variety of mobile devices (Cochrane and Rhodes 2013). When PLD provision exploits the affordances of a virtual environment to combine virtual mentoring with an online Community of Practice (CoP), education practitioners can be supported, within their own context (location), to apply, build and shape their knowledge and skills, at a time that suits them. Virtual mentoring is also known as distance mentoring, remote mentoring, tele-mentoring, cyber-mentoring and eMentoring. With the exception of tele-mentoring, which tends to be mentoring via a phone, a virtual mentor works with a mentee using:

- synchronous tools: webinars, Voice Over Internet Protocol – such as Skype and text chat; and
- asynchronous tools: emails, discussion forums, blog posts and comments on posts.

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Therefore, a virtual mentor needs well-developed digital citizenship skills, on top of those skills required by a mentor in a face-to-face context.

While many studies explore the potential of face-to-face mentoring and professional learning communities (Kidd and Murray 2013), there are fewer studies that investigate the effects in a *virtual* environment, especially in the Aotearoa New Zealand context. This article, therefore, describes the roles of a virtual mentor working in a Professional Learning and Development (PLD) initiative that has been offered in Aotearoa New Zealand from 2009 to date. It also discusses findings from the associated research study, providing evidence of the unique benefits of virtual mentoring, as well as shifts in mentees' self-efficacy, and their perceptions of the changes they experience.

2. Professional development

Virtual provisions are necessarily external to a professional learner's work-context, and yet to be effective they 'cannot be separated from ... [the practitioner's] ecological contexts, or from the educational activities that they enhance' (Peled, Peled, and Alexander 1994, p. 49). Therefore, the situating of virtual PLD is fundamentally important because 'many challenges [that] staff face are local ... and need to be addressed "on the ground"' (Stoll 2004, p. 2). In addition, PLD that recognises socio-cultural considerations has been reported to have a positive impact on student learning outcomes, partly because there is a direct connection between principles of effective teaching practices and consequent adaptation of those practices to local circumstances (Timperley 2008).

3. Mentoring

Mentoring, either face-to-face or virtual, has many definitions, and these vary depending on the context in which the mentoring relationship is formed. In this article, I have used the following definition: 'Mentoring is a developmental alliance between equals in which one or more of those involved is enabled to: increase awareness, identify alternatives, initiate actions and develop themselves' (Hay 1995, p. 3). With a developmental approach, the focus is on personal and professional development, as opposed to a functional or process-focussed emphasis. Other key aspects of this approach include:

- promotion of mentee voice to aid cognisance of shifts in perspectives and thinking,
- enhanced motivation,
- recognition/celebration of positive growth,
- provision of 'a mirror ... to extend the ... [mentee's] self-awareness' (Daloz 1986 in Stokes 2011, p. 8), and
- introduction of challenge 'to promote self-examination and further development of alternative perspectives' (Stokes 2011, p. 8).

These factors help mentor and mentee to be aware of indications 'that the relationship may be transformative and growth producing for both partners' (Stokes 2011, p. 8).

4. Virtual mentoring

Virtual mentoring is based on practices developed for face-to-face circumstances. The processes are similar in that they involve two people working together in a mentoring relationship, although in different geographic locations (Owen, 2014). The virtual mentor (and mentee) may be working from home, partly based in an office environment or school, completely based in an office – or at the beach! Virtual mentoring should not, however, be seen as the 'poor cousin' of face-to-face mentoring, or as a more cost-effective option because this is likely to result in a relationship that is driven by needs of an institution rather than the learning or professional developmental requirements of the mentee (Brockbank and McGill 2006).

5. Self-efficacy

There is a substantial body of work that focuses on self-efficacy, which is beyond the scope of this article to explore in detail. I will, therefore, offer a brief overview, especially in connection with self-efficacy in virtual environments. Most people, especially within their professional context, have:

- aspirations,
- goals,
- plans and
- a sense of what they need to change or develop.

Whether an individual makes progress depends, in part, on their self-efficacy (Bandura 1977): the way in which an individual evaluates their capacity to apply (and persist with to the point of mastery) the necessary behaviours to attain their goals, even when faced with challenges (see Table 1). Therefore, perceptions of self-efficacy strongly influence an individual's motivation and ability to perform related behaviour (Bandura 1986).

Four factors can positively influence self-efficacy (Bandura 1977, 1986):

- performing a task successfully (experiencing mastery),
- encountering examples of successful performance of a task/modelling of associated behaviours (vicarious experience),
- being involved in a context that provides direct encouragement (social persuasion) and
- perceiving how to interpret emotional and physical reactions when experiencing stress (physiological factors).

Table 1. Comparison of tendencies of individuals with well-developed self-efficacy and low sense of self-efficacy.

Well-developed self-efficacy	Low sense of self-efficacy
Overestimate ability to complete a task	Underestimate ability to complete a task
Sustain efforts, even when facing obstacles	Cease efforts when faced with challenges
Recover quickly from setbacks/see them as learning opportunities	Opt out when things do not go to plan
Attribute setbacks to external factors	Attribute non-achievement to personal ability
Take a broad view of a task, which can lead to effective planning but surface understanding	Invest time learning about a subject and/or skill

A PLD provision that combines access to a virtual mentor and a supportive online CoP is able to provide opportunities for social influence, feedback and modelling, build a culture of trust, support success and use approaches that positively impact personal cognition (Owen, 2014).

6. The virtual professional learning and development programme

The Virtual Professional Learning and Development (VPLD) initiative both inspired and excited me (the author of this article, researcher and project lead for the initiative), in part because I could design PLD that was personalisable (as opposed to whole school PLD, for instance) and based mainly in a virtual environment. The virtual aspect I felt likely to have both benefits and challenges, while offering learner-directed opportunities for education professionals to develop their practice (Owen and Dunmill 2014).

6.1. Background

Our aim in 2009 was to develop a model of PLD that would be both scaleable and sustainable and based on participants learning in authentic and meaningful contexts using virtual tools and services. Table 2 illustrates the stages and steady growth of the VPLD programme, as well as the push toward achieving these aims. Other key requirements, identified in initial internal documentation by the New Zealand Ministry of Education, were:

(1) improved student achievement,
(2) improvement of capability of participants,
(3) development of effective online CoP,
(4) use of virtual mentoring and
(5) collaboration with wider education communities.

Table 2.   The VPLD programme 2009–2014.

Year	Stage of project	Number of virtual mentees/roles/sectors
2009	Instigated/initial design phase working with external stakeholders	
2010	Piloted/evaluated	Nine educators/education leaders Multiple disciplines Primary/secondary/tertiary sectors
2011	Trialled/evaluated	20 educators/education leaders Multiple disciplines Primary/secondary sectors
2012	Rolled out/evaluated	26 educators/education leaders Multiple disciplines Primary/secondary sectors
2013	Grown/developing virtual mentors initiative launched (scalability/sustainability)	46 educators/education leaders Multiple disciplines Primary/secondary sectors
2014	Consolidated/developing virtual mentors initiative launched	54 educators/education leaders Multiple disciplines Primary/secondary sectors

6.2. Design

We designed the VPLD programme to offer multiple ways to participate and to support mentees to identify areas of professional growth based on their own needs, as well as those of their students, school and community (Owen 2012). The programme had no formal 'content', associated accredited institution or formal assessment. Virtual mentors meet online with their mentees, using Adobe Connect, Skype or Google Hangouts, once a month for between 45 and 90 minutes. Mentoring strategies are customised, and during meetings subjects range from pedagogy and learning theories, to challenges, successes, what the participant has been working on and how things have gone (Owen 2012). Working with their virtual mentor the mentee:

- selects, refines and revisits their goals,
- identifies blockers and enablers,
- discusses how they will evaluate their professional development,
- outlines action points and
- identifies areas of required support, and interim goals (Owen 2011).

During the application process, potential mentees provide information about their professional interests, experiences and challenges, and this enables a committee (comprising the virtual mentors) to identify suitable partnerings. While subject matter familiarity and experience in a particular role is desirable we found that it was not essential, plus, we made sure a co-virtual mentor could be requested if specific discipline or role knowledge is required. Mentees can participate in the programme for 3 years; in the first 2 years, they work on their main professional development foci, and in the third year, they have the option to transition into a Developing Virtual Mentor (DVM) role, which is described below.

The VPLD online community had 393 members at the time of writing. During the pilot, the mentees and I decided to keep the online community private. In the second year, after revisiting the overall aims of the initiative, we decided to open it up to educators in any part of the world, but to keep some groups restricted. These groups offered an extra layer of privacy, which some mentees found helpful when beginning to craft and share reflective blog posts about their practice. The open part of the online CoP offered a comfortable environment to have wider discussions and to 'challenge' pedagogy and practice. The VPLD mentors, who were also community facilitators, employed community enhancement strategies such as:

- writing and sending out a monthly e-newsletter
- showcasing conversations/contributions,
- celebrating participant successes and
- facilitating all-community webinar sessions (specific events, e.g. end-of-year celebration, or a particular education focus).

6.3. VPLD virtual mentors

The only mentor in the pilot of the VPLD, I was appointed, in part, because I had a combination of project launching and management skills, as well as mentoring skills. My mentoring skills had been developed over several years as a mentee, and then

a mentor (although I did not have formal qualifications in mentoring, nor was I experienced in virtual mentoring – this being something I developed rapidly through self-directed PLD over the first year)! During the pilot, I developed a role description and minimum requirements for a virtual mentor in preparation for the appointment of further mentors as the programme expanded, which grew to three in 2011. At this point, I introduced additional support such as:

- a set of guidelines and protocols,
- PLD for virtual mentors, including working with their own virtual mentor and
- formative appraisal.

The virtual mentors needed a wide set of skills and experience, in particular to recognise and accommodate needs and socio-cultural factors that may be less apparent in a virtual environment. The role also required a commitment of time beyond what might be required face-to-face, to engage in the online CoP, as well as directly with mentees when support was required between monthly meetings. As such, meta skills such as time management, planning and boundary setting were as important as communication skills.

6.4. Developing virtual mentors

In 2014, the VPLD team launched the DVM initiative with 16 participants. To engage in the DVM programme, an existing VPLD mentee applied, and if accepted, they were partnered either with their own individual mentee, or a small group of mentees. At the same time, to build their own mentoring skills, the DVM continued to work with a mentor from the VPLD team. Other support included a two-day face-to-face DVM wananga (educational seminar) each January, access to a series of online modules, and a monthly webinar.

7. Methodology

Since inception, a research study of the VPLD programme has been conducted by the author, who aimed to 'discover how things work in a particular learning context, using a mixture of qualitative and quantitative sources of data' (Phillips and Gilding 2000, p. 2). Within this study, qualitative was interpreted as 'any kind of research that produces findings that are not arrived at by means of statistical procedures or other means of quantification' (Strauss and Corbin 1990, p. 17). The data generated were mainly qualitative because they are more appropriate for the study of adult learning in a virtual environment (Reeves 1993). The quantitative data were useful in identifying trends and changes, in particular in behaviour across the mentees and within the online CoP, which could then be studied in more depth (Yin 2009).

The case study method was used to aid understanding of a select subset as a distinct whole within its particular context (Merriam 1998): in this case a professional development programme that used a virtual mentoring approach to provide professional development for education practitioners in Aotearoa New Zealand. Case studies are sometimes considered to be a qualitative technique, but may use quantitative information (Yin 2009), which was in keeping with the mixed methods used in this study. One drawback of the case study approach is a loss in breadth of generalisations about overall interrelation and effectiveness of processes and

outcomes (Yin 2009). To help provide breadth eight 'stories of change' were developed about mentees and findings compared. One aim of these stories was to explore the embedding of new professional knowledge, practice and beliefs, as well as how participants constructed knowledge and made sense of their learning.

7.1. Research questions

The study focussed on evaluating the efficacy of the design of the VPLD programme, and the five underpinning questions were:

(1) How does working with a mentor affect participants' opinions about their own efficacy and teaching practice?
(2) How are participants' opinions of the value of the VPLD project affected by participation in the VPLD CoP?
(3) Which external factors have an effect on access to and satisfaction with the VPLD programme?
(4) What are the observed effects on participants over the course of the VPLD programme?
(5) What are participants' opinions about the effects of shifts in their teaching practice on their students' achievement and engagement?

7.2. Participants and procedures

Every year since 2010 all (155) VPLD mentees were sent an invitation to participate in the research study, along with information about the study and a consent form. We had a 100% return rate (after reminders were sent out) and an 85% agreement to participate. Participation was voluntary, and there was no additional incentive offered to participate. A smaller set of mentees also agreed to have their longitudinal data used to develop a story of change. Data were not collected specifically around effects on virtual mentors (the next stage of my research).

In the interests of providing a sense of context I draw from a range of the stories of change, but focus in more depth on the two most recent. Mentee 1 has participated in the VPLD programme since January 2012 and is a DVM working with one mentee in another school. She is a specialist teacher and Head of visual arts and art history at a remote rural co-education secondary school in Aotearoa New Zealand. She also teaches students in geographically dispersed schools via the Virtual Learning Network (VLN) (Owen and Dunmill 2014). Mentee 2 has participated in the VPLD programme since January 2011 and is a DVM working with two mentees in other contexts. At the time she joined the VPLD programme, Mentee 2 was Assistant Principal at X College, where she taught Horticulture. Her focus was 'Māori engagement so that it leads to improved Māori achievement in my classes' (Goal setting doc, 2011), as well as developing her leadership role. In 2013, Mentee 2 moved away from the college into another position to focus on professional development provision.

7.3. Methods of data collection

Data were generated using a range of methods and tools that included:

- three online surveys per year (January, June and November/December),
- recorded discussions and notes from virtual mentor meetings,

- contributions from participants in all areas of the online CoP,
- Webinar session recordings and
- emails.

The surveys, designed with mainly open-ended questions, aimed to gather richer, fuller understandings of the experiences of the VPLD participants.

- The quantitative online survey responses were exported into Excel, analysed and interpreted. The respondents' pre- and post- pilot survey data were analysed separately.
- A qualitative approach was used to interpret the open-ended survey responses, as well as other forms of data collected from virtual meetings and online interactions. Recurring words were noted as possible emergent themes and used as codes. Comparative methods of analysis were used during coding (Charmaz 2008).

7.4. Results and discussion

The volume of data collected was extensive so I only discuss findings and implications related to virtual mentoring, along with mentees' perceptions of their participation in the VPLD programme. Benefits and drawbacks were evident from the analysis of data and as such form the structure of this section of the article. Verbatim comments and observations gathered from the data have been interwoven into the narrative. Where the data source allows, quotes are attributed to mentee 1, 2, 3 and so on.

7.4.1. The benefits of not knowing

Differences between mentoring that happens between people in the same physical location and virtual mentoring include a greater reliance on oral/aural communication to build relationships, and the likelihood that the mentor and mentee will not be familiar with each other's contexts. Although these may appear as drawbacks, findings from this study indicated that, on the whole, they were benefits. Although the virtual mentoring relationships were a little slower to develop, trust formed *because* virtual mentors and mentees were less able to make assumptions based on demographics (such as ethnicity, age and physical appearance), as well as influences such as the room and furniture. Some mentees also found the virtual environment a more comfortable medium to candidly share their thoughts, ideas and observations; a place where they could be *honest about what they are experiencing* (Mentee 4, mentor notes, 2011). This may help explain the tendency whereby some used a webcam during the initial part of a mentoring session but it was often turned off after greetings were exchanged. Sometimes this was because of bandwidth considerations, but more often it was experienced as a distraction from *what is being said and how it's being said* (survey response, 2013), with non-verbal signals identified as impacting the quality and duration of reflection and sharing.

In a virtual environment, not being a part of each other's contexts appeared to encourage the mentee to describe and reflect on their context in greater depth. Also, in an effort to become familiar with the mentee's context, the mentor tended to ask for more detail. Unfamiliarity with context also enabled the virtual mentor to offer alternative perspectives, challenge thinking and actions and discuss strategies to move a situation forward such that mentees described them as:

- someone who would listen with no risk or adverse consequences because the mentor was *an independent, completely understanding and knowledgeable critical friend ...* (survey response, 2011)
- a support for growth directly within a school setting – something that was described as *really 'real'* (Mentee 4, mentor notes, 2011) – rather than being *taken out of school on special days for pd* (Mentee 4, mentor notes, 2011).

Spontaneity and support were maintained through Skype messaging, calls and emails between scheduled sessions, which helped build the relationship. Mentees consistently indicated the value of being able to share the excitement of a success, as well as the timely support that enabled them to unpack issues or ideas as they arose. However, there was a need for virtual mentors to set boundaries and ensure that interactions did not build dependency.

7.4.2. Developing self-efficacy

An analysis of the two stories of change, as well as data from the annual evaluative cycle, suggests that the individuals developed a sense of self-efficacy that motivated them to:

- identify their aspirations, develop associated goals and plan how to attain them, and
- develop a sense of what they needed to change in their practice – to have *time to try ... ideas, to make ... mistakes and to reflect upon our success* (survey response, 2010).

When encountering challenges, some reported that sessions with their virtual mentor *made all the difference* (Mentee 7, mentor notes, 2011), because their mentor was able to support them when they *encountered barriers*, as well as *push me in new directions, provide encouragement and network me with the wider e-Learning community* (mentor notes, 2011). However, it was not like flicking a switch, and both Mentee 1 and Mentee 2 describe on-going crises of confidence. Mentee 1 indicated that *I ask myself if I'm good enough ... if I can cope with another year* (blog post, 2014), and Mentee 2 said that she sometimes *feel[s] as though it [teaching] is a waste of time* (mentor notes, 2014). What supported Mentee 1 and Mentee 2 was working with their virtual mentor who helped with 'sense making'. Mentee 1, for instance, identified that her head was full of ideas, options and questions. Even though she constantly had critical dialogue with herself, she identified that she needed her mentor and members of the online CoP to help consolidate her thinking and evaluate her practice (Owen and Dunmill 2014).

7.4.3. Perceptions of student achievement

Although it is problematic to suggest a direct causal effect between this PLD intervention and impact on student achievement of learning outcomes, mentees perceived that participating in the VPLD programme had positively impacted their:

- practice – '*I am different, and teach differently. It's great*' (survey response, 2013),
- students' engagement and wellbeing – students were '*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 ... tricky to get them to stop working!!'
(Mentee 10, end-of-year reflection, 2011) and

- motivation – students' work had '*improved in quality and some parents ... ask what I've done to their kids because they really want to do their homework*'
(survey response, 2011).

Mentee 1, with increasing self-efficacy, developed her use of eLearning in general and knowledge building in particular. Through sessions with her virtual mentor, she worked on her practice to become a *thinking coach*, who enabled students to take ownership of their learning, and engage in more higher order thinking. Via online collaboration and inquiry methodology students were able *to know and value each other's ideas ... and to build and improve their ... understanding ... together* (blog post, 2013). She summed up this shift, and what she perceived as an associated improvement in preparation for National Certificate of Educational Achievement, when she shared that *Students are now thinking about how collaboration works for internal assessment*, something she felt was *liberating and quite a turnaround for me* (mentor notes, 2013). She also conducted surveys with students, who indicated that they had developed a strong sense of community as they shared their ideas (Owen and Dunmill 2014).

7.4.4. Providing flexibility and overcoming isolation

As I discussed earlier in the article, physical distance can be a barrier to accessing PLD, especially in a country where many people live in small rural communities, and public transport is limited or non-existent. Travel to participate takes time and money, or may not be possible due to family and/or community commitments, or because a person is facing physical challenges. By offering the VPLD programme and DVM initiative it meant that:

- issues with professional isolation were addressed. Mentee 1 reflected that *I ... realised ... how massive and pervasive professional isolation could be* (blog post, 2013), such that prior to joining the VPLD programme had felt she was ready to leave the teaching profession. She reflected that the *VPLD ... has been critical for my on-going ... [development] and resilience* (VLN blog post, 2013),
- PLD was portable so that when a mentee or mentor moved context or location, they could continue to work together,
- mentees could tailor their participation so that they *don't feel overburdened. Everything works alongside things I am already doing* (survey response, 2012),
- flexibility of timing – *[I] can do it at a time that suits ... usually evenings* (Mentee 7, mentor notes, 2011) and
- costs were kept low because there were no travel requirements, few administrative needs and no premises. One mentee observed that they saw this *as the ... most accessible ... professional learning for these current times* (2011, survey response).

7.4.5. Stretching professionally and taking on new roles

A VPLD mentee who takes on the role of a DVM can potentially influence a large number of geographically disparate practitioners and was therefore an important consideration for scalability and sustainability. The on-going connection with their

own virtual mentor enables the DVM, while grappling with the complexities of continually learning about themselves, to mentor others in a way that models effective practice. Mentee 1 and Mentee 2 both took on DVM roles, partly due to growing self-efficacy where they were *seeing ... [themselves] as a mentor* (mentor notes, 2011), and *knowing that I have things to offer* (mentor notes, 2011). This self-efficacy could motivate mentees to want to ... *do something with PD with teachers this year* (Mentee 9, mentor notes, 2012), and where this was not possible within a specific school context a DVM could work with a mentee in another region.

7.4.6. The VPLD online CoP

Online communities take time to form and might initially only have a few active contributors, and the VPLD online CoP was no exception:

- in February 2010, had 15 members and five blog posts, four of which were made by the community facilitator/virtual mentor,
- by February 2012, there were 17 blog posts, six of which were made by virtual mentors. The maximum number of posts was 20 (September), seven of which were made by participants,
- in 2011, the community made the decision to open the online CoP to general membership. Membership increased to just under 100.

    ◦ 374 blog posts were shared (50% by virtual mentors),
    ◦ 49 discussion forums were set up (75% by virtual mentors),
    ◦ 187 videos were shared (90% by virtual mentors) and
    ◦ 190 comments were posted (50% by virtual mentors).

Half of the initial VPLD mentees (2010) indicated that they had not been members of an online community before and may not have been aware of the level of engagement required to create a vibrant community, nor possessed the associated requisite skills. Growing skillsets, along with the opening up of the community, increased the range of voices and responses, while also creating a wider sense of audience. We also acknowledged that in this self-motivated learning environment, participants had the freedom to choose whether to engage, and some declined to embrace the opportunity. Ultimately, though for many mentees, because virtual mentoring went hand-in-hand with participation in the VPLD online CoP, sharing and giving/receiving feedback helped decrease isolation, strengthen resilience and develop self-efficacy.

7.4.7. Reshaping professional identity: virtual mentoring + online CoP

Findings suggest that the online CoP and virtual mentoring sessions were found to be of equal importance in the reshaping of professional identity and knowledge, but for a variety of reasons. In part, the online CoP provided the forum to:

- ask advice,
- discuss theory and practice,
- share resources and knowledge,
- offer practical assistance and
- reflect, think and process.

The process of sharing in the online CoP resulted in an integrative process where different types of knowledge intersected, and where, with further trialling and development of identity, the process sometimes proved transformative resulting in new synthesised forms of knowledge (Graham 2011). Mentees were encouraged to build networks, thereby fostering improved connections, and building means for sustainable, long-term support. In addition, 'non-official brokers and opinion leaders' (Cranefield, Yoong, and Huff 2011, p. 16) had an important role to play in the cohesion of the community, while also challenging participants to reach beyond their comfort zones.

7.4.8. Challenges

As with most PLD, there were challenges. Every year between one and three participants withdrew within the first few months of participation. The reasons were fairly evenly divided between:

- ill-health,
- family commitments,
- a promotion or change in role,
- unsupportive leadership or
- practical reasons, such as issues with connectivity.

Some challenges were beyond the control of the project team, such as reliable access to a computer and the Internet – or at least a phone (there are some parts of Aotearoa New Zealand with no mobile phone coverage, and where the only landline is in the principal's office). Where leadership challenges were faced mentees felt isolated and vulnerable, and working within the VPLD programme was often reported as a lifeline, providing, for instance, *ammunition to counter the cynics, and resources to share with my willing but under-skilled colleagues* (survey response, 2013).

8. Conclusion

This article has described the roles of a virtual mentor and illustrated some dynamics and results for education practitioners participating in the VPLD programme. Findings provide insights into mentees' perceptions of working with a virtual mentor at the same time as participating in an online community of geographically disparate peers. Working with a virtual mentor was seen as essential PLD, especially when a mentee was under stress, because of the guidance and motivation provided. Notable too was the (sometimes profound) impact this had on their own practice and professional identity: *It has been a career changer for me, ... I think that as a member of VPLD you feel truly valued as an educator but it does not stop there, as you make goals and advance* (survey response 2013).

Virtual mentors worked to create online spaces and used approaches that recognised the four factors that influence the development of strong self-efficacy. The PLD 'came to' the mentees, had duration, and fitted within mentees' existing professional (and personal) lives, while also challenging them. Mentees were supported to be more open to learning, taking risks and seeing non-achievement as formative when things did not work out as they may have hoped. The mentoring fitted alongside other forms of PLD that mentees were involved in, helping to ensure a more complementary,

consolidated experience that built toward a mentee's goals: *I've learned . . . and been inspired over time, without pressure of instant results. That's what PD should be about* (Mentee 6, end-of-year reflection, 2010).

The VPLD programme not only increases mentees' ability to cope with change, but also to celebrate and embrace change (Owen 2012). This in turn encourages some mentees to choose to become DVMs, thereby offering a model for sustainable scalable support with education practitioners taking on roles as 'change agents' and leaders. This in turn continues to shape alternative career pathways for many mentees, while on-going access to their own mentor and online CoP provides support.

While some of the findings are likely to have been similar in a face-to-face mentoring context, others can be attributed to the virtual nature of the PLD, in particular those that are reliant on trust, regular and easy access, social modelling and social persuasion from a wide range of practitioners that extends beyond a mentee's immediate professional context. As such, it is likely that demand for models such as that offered by the VPLD programme will grow and in turn increase momentum behind the reconceptualisation of PLD.

Acknowledgements

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