Changing minds and transforming professional development...virtually

Hazel Owen
Ethos Consultancy NZ

Imagine a professional learning and development (PLD) approach designed to dovetail with what educators are doing in their classrooms and online – PLD that is accessible 24/7. Rather than asking educators to add another focus to their busy lives, this approach would support their teaching in a way that could rapidly enhance their students' engagement and achievement.

The Virtual PLD (VPLD) programme was trialled and evaluated in 2010 with 10 teachers from the tertiary, secondary and primary sectors, and is being piloted in 2011 with 20 teachers and principals. The findings from the 2010 in-depth evaluation have fed forward into the pilot, which in turn is providing opportunities to test the robustness of the existing model with a larger number and variety of participants. This paper will provide a description of the VPLD model, as well as an overview of some of the findings from the 2010 trial.

Keywords: professional development, community of practice, mentoring, eLearning.

Introduction

The Virtual PLD (VPLD) initiative was instigated in October 2009 by the NZ Ministry of Education, who also funded the project. The VPLD model and approach was trialled and evaluated in 2010 with ten teachers from the tertiary, secondary and primary sectors, and is being piloted in 2011 with twenty teachers and principals. All participants are in a variety of locations, as well as from a range of disciplines, and diverse backgrounds, ethnicities and cultures. Five principle objectives were to:
9. Focus on contextualised, personalised learning for educators;
10. Foster Communities of Practice (CoPs) that would encourage collaborative professional relationships;
11. Develop an approach to PLD underpinned by mentoring;
12. Raise student achievement of learning outcomes, partly by ensuring a strong student focus, as well as links to curricula and National Certificates of Educational Achievement; and
13. Be sustainable (financially and environmentally) and scaleable.

This paper will describe the VPLD model, as well as discuss some of the findings from the 2010 trial and associated research study. Further details of the study and results to date will be presented at the conference.

16. Insights from the literature

The VPLD model drew from a number of research findings, several of which identify factors that can have positive effects on teaching practice. Key ones include the design, duration, frequency, facilitation, context, and

forms of the PLD, which affect the depth of assimilation and sustained influence on teaching practice (Ham, 2009). To encourage iterative cycles of reflection and evaluation, challenge assumptions, create formative cognitive dissonance, and to encourage shifts in practice PLD needs to be:

13. Integrated into what an educator is already doing (Timperley, Wilson, Barrar, & Fung, 2007);
14. Flexible enough to be personalised to an educator's own context. Context is important because educators can trial new approaches with their own students and receive feedback (Mayes, & de Freitas, 2004);
15. Provided in frequent short bursts over an extended duration – preferably three years or more (Fullan, 2008);
16. Built into existing roles and daily routines (e.g. preparing a session for students) (Shea, Pickett, & Li, 2005).

Above all, it is imperative to recognise that professional learning is a social activity (Salomon, 1993); therefore easily accessible, regular interaction with peers and mentors is paramount (Ham, 2009), as is the development of social spaces for building relationships. PLD that exploits the potential offered by Computer Mediated Communication (CMC) can enhance the formation of CoPs, especially where participants are encouraged to build personal online learning networks, while also asking questions, collaborating, discussing, and planning further actions (Sharples, 2000).

17. Description of the VPLD programme

The points briefly outlined in the section above are reflected in the design of the VPLD programme, which is conceptualised visually in Figure 1, and described below.
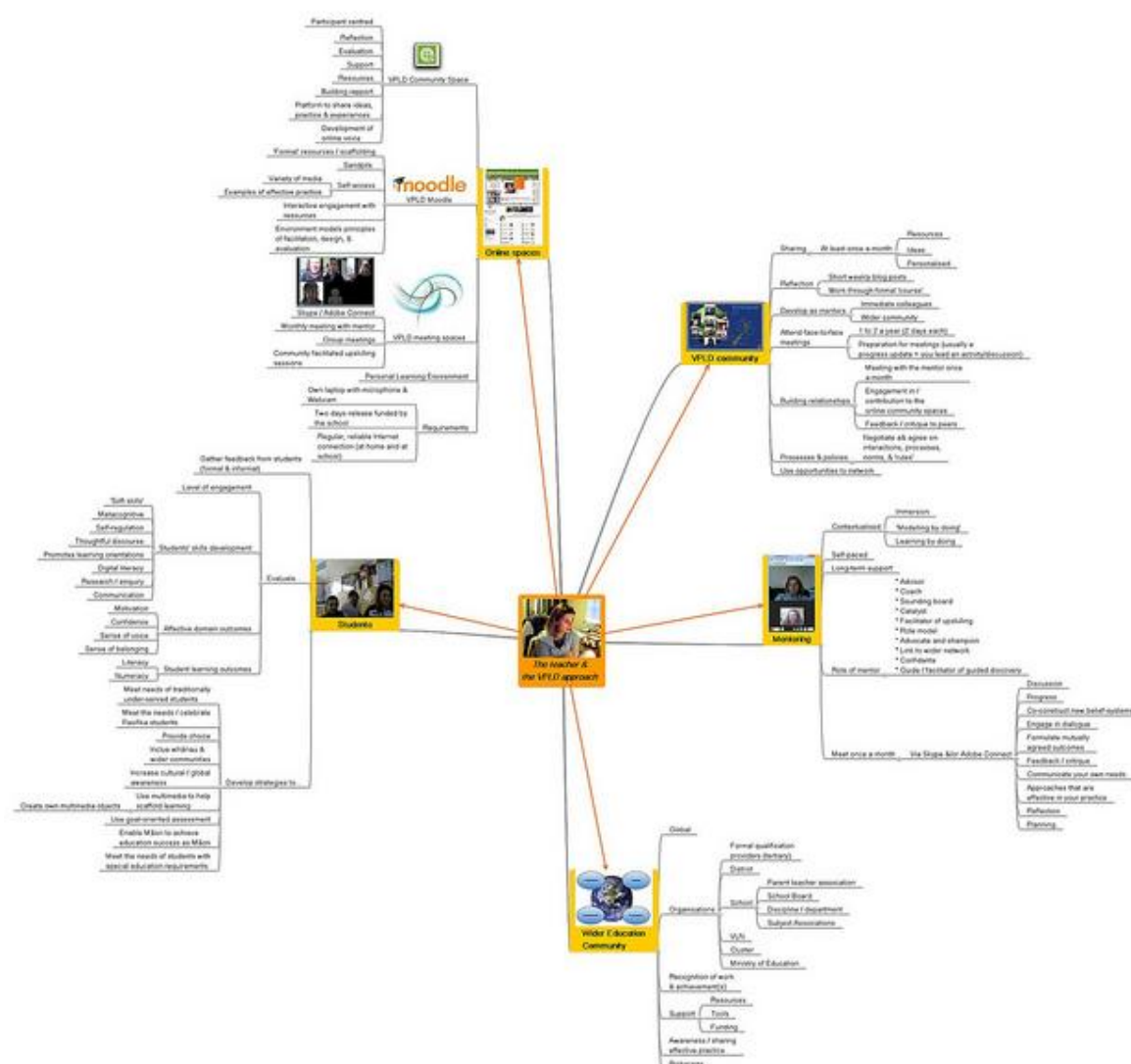

Figure 1: The education practitioner and the VPLD model (*please click here to see full size*)

The VPLD community

Prior to participation in the VPLD programme several teachers indicated that they felt isolated in their own school community, in part because of the apparent lack of support and understanding around what they were attempting to achieve with students. So, particularly important was the sense that they were part of a meaningful CoP. When CoPs are an integral part of PLD they can provide opportunities to develop supportive professional networks (Wenger et al., 2002), as well as a space to participate in conversations around learning and teaching and to share practices (Brown & Duguid, 2000). Because the VPLD online CoP has formed over time it offers a safe environment in which educators can discuss and challenge alternative points of view 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) were negotiated and established by the initial ten educators - although they have since been re-negotiated, evaluated and altered as the CoP has matured and grown.

An integrated model of virtual professional development that relies on learning and working collaboratively is likely to be enhanced by an initial face-to-face meeting if possible. 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 via CMC. As part of the VPLD 2010 trial there were two face-to-face meetings, whereas in 2011, due to growing numbers, only one face-to-face meeting is planned. Alongside the face-to-face meetings a variety of community building strategies are employed such as sending out a monthly newsletter that highlights conversations and contributions in the online Community Ning space, as well as showcasing the work of community members, and celebrating successes. There are also all-community web conferencing sessions, either to mark, for example, the end of the year, or with a specific pedagogical and/or skills focus, such as facilitating online webconferencing sessions.

Mentoring

The VPLD programme has no formal 'content'; rather participants develop their own learning goals around projects that interest them, within a teaching as inquiry process. Each participant is then partnered with a mentor with whom they meet online using Adobe Connect (a webconferencing tool that enables interactive synchronous communication), or Skype, once a month for between forty-five to ninety minutes. During monthly meetings a variety of subjects are discussed including pedagogy, what the participant has been working on with their students, student learning outcomes, and how their students have been reacting. The participant also identifies areas of support they need. This provides opportunities to encourage collaboration with the CoP as well as self-access to resources. However, where extra support is required 'just in time' tailored feedback, or upskilling (for example, by using personalised 'how to' videos or audio and written critique) can be provided. Currently there are three mentors employed within the VPLD team, but the model scaffolds and encourages participants to undertake mentoring roles in their own context(s).

Online spaces

The VPLD programme has three main online spaces 1) a community online social networking space (Ning), 2) a 'sandpit' area and access to self-paced resources via the learning management system, Moodle; and 3) Adobe Connect. The online spaces are used for a variety of purposes such as recording self-reflections, and offering comments, suggestions and encouragement. In addition, participants are encouraged to post a short monthly report (one-hundred-and-fifty to three hundred words) that gives an overview of their activities, reflections, and 'next steps'. As such, there is an awareness of needs, as well as opportunities for co-constructing new belief-systems about learning and teaching (Bishop, Berryman, Cavanagh, & Teddy, 2007).

However, during the trial in 2010 it became obvious that among the VPLD teachers there was not equality of access to the technology itself, or in the level of technical support. Previous studies have shown that external factors have an extensive impact on access to and satisfaction with learning experiences (for example, Owen, 2010). While participants' ICT skills and experience could be augmented, some negative factors were technical (bandwidth and hardware / software) and could not be resolved by the mentor or VPLD community. There were also issues around the blocking of essential sites in a school setting. For the bigger picture of scaling the VPLD model to a nationwide initiative these factors have several implications. The regular virtual meetings and sessions rely on video, audio, and screensharing. Once ultra-fast broadband has been rolled out in New Zealand, bandwidth should not be an issue. However, suitable, functioning hardware also needs to be available. Therefore, there is an associated cost implication to institutions (Shea, Pickett, & Li, 2005), that is accompanied by a need to assess the more rigorous blocking of sites in education workplaces.

18. Students

VPLD participants are encouraged to evaluate the effects of their shifts in practice on the learning experience as perceived by students, as well as gathering feedback to use for further changes, and (although problematic because the the variety of influences within each learner's environment) impact on student learning outcomes. The evaluations (formal and informal) conducted to date by VPLD teachers have identified positive effects as well aspects that have, when reflected on by the teacher, informed shifts in design and / or teaching practice; one teacher commented: "Personally, I only need to see the achievement, attitude and engagement of my students to know that I am on the right track". Effects include:
17. Increased level of engagement, as well as cultural and global awareness;
18. Development of 'soft skills' (e.g. time management and sense of self as 'learners');
19. Development of metacognitive, communication, digital literacy and research / enquiry skills;
20. Self-selected use of a range of multimedia to scaffold learning;
21. Creation of a range of own multimedia objects to demonstrate learning and / or practice skills; and
22. Positive impact on affective domain outcomes such as motivation, confidence, voice, and sense of belonging.

19. Wider education community

In the VPLD programme the professional learning is subsumed within the participant's role within their own institution's community, rather than being the central focus as can happen with other approaches to PLD. However, there are still concerns around the level of involvement of each participant's school community, and a number of strategies have been formulated. For example, in 2010 members of the wider education community were invited to join the VPLD online social space and encouraged to actively contribute, and in 2011 principals who have teachers participating in the VPLD programme were invited to meetings to acknowledge possible concerns and answer queries.

20. Conclusion

The extended duration of the VPLD appears to have a noticeable effect on teaching practice, as well as offering opportunities to forge lasting professional relationships. A clear example of how well the VPLD trial was received is: "Thanks for the opportunity. I've learned much and been inspired over time, without pressure of instant results. That's what PD should be about". The significant level of engagement and development demonstrated by nine of the ten teachers participating in the 2010 trial suggests that the approach is flexible enough to suit the myriad needs of educators as learners. The appropriacy of the VPLD model going forward will be explored in ongoing research (2011 to 2013).

While the findings of the 2010 trial may be consistent with any well-designed PLD intervention, one positive point of difference was that the VPLD – by its very nature (mainly online) – immersed practitioners in a virtual environment. Practitioners are part of a learning environment that models the principles and facilitation, design, and evaluation approaches that can potentially be applied to enhance their own students' learning experience and outcomes. This immersion means that there are opportunities for 'learning through doing', while also encouraging reflection on issues that can be an integral aspect of online learning. The CoP that underpins much of what happens in the VPLD in turn offers a forum for developing strategies that teachers then adapt to suit their own context and students. As such, participants are encouraged to adopt new pedagogies, technologies, tools, and vocabulary partly from the 'viral' effect of sharing effective practices within a CoP.

References

Bishop, R., Berryman, M., Cavanagh, T., & Teddy, L. (2007). Establishing a culturally responsive pedagogy of relations. http://www.educationcounts.govt.nz/publications/?a=59197 [viewed 10 Sept 2010].
Fullan, M. (2008). *The six secrets of change*. San Francisco: Jossey-Bass.
Brown, J. S., & Duguid, P. (2000). *The social life of information*. Cambridge, MA: Harvard Business School Press.
Ham, V. (2009). *Outcomes for teachers and students in the ICT PD School Clusters Programme 2005-2007 - A national overview*. Wellington: Ministry of Education. http://www.educationcounts.govt.nz/__data/assets/pdf_file/0011/48764/921_Outcomes2005-07.pdf [viewed 10 June 2010].
Mayes, T., & de Freitas, S. (2004). JISC e-Learning Models Desk Study: Review of e-learning theories,

frameworks and models.
www.jisc.ac.uk/uploaded_documents/Stage%202%20Learning%20Models%20(Version%201).pdf [viewed 01 July 2008].

Milligan, C. (1999). *Delivering Staff and Professional Development Using Virtual Learning Environments* Edinburgh: Heriot-Watt University. http://www.jisc.ac.uk/media/documents/programmes/jtap/jtap-044.pdf [viewed 18 Feb 2011].

Owen, H. (2010, October). The Trials and Triumphs of Adapting a Tertiary face-to-face Course to Online Distance Mode. *Practice and Evidence of Scholarship of Teaching and Learning in Higher Education, 5*(2), 137-155. http://www.pestlhe.org.uk/index.php/pestlhe/article/view/93/206

Salomon, G. (1993). No distribution without individuals' cognition: A dynamic interactional view. In G. Salomon (Ed.), *Distributed cognitions: Psychological and educational considerations* (pp. 111-138). Cambridge, UK: Cambridge University.

Sharples, M. (2000). Disruptive Devices: Personal Technologies and Education. http://www.eee.bham.ac.uk/handler/ePapers/disruptive.pdf [viewed 15 May 2008].

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. http://www.irrodl.org/index.php/irrodl/article/viewArticle/238/493

Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). Teacher professional learning and development: Best evidence synthesis iteration [BES]. Wellington: Ministry of Education. http://www.educationcounts.govt.nz/__data/assets/pdf_file/0017/16901/TPLandDBESentire.pdf [viewed 10 Sept 2010].

Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston: Harvard Business School Press.