THE DISTRIBUTION OF INSTRUCTIONAL LEADERSHIP IN eLEARNING CLUSTERS: AN ECOLOGICAL PERSPECTIVE

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ABSTRACT, CONCLUSION and RECOMMENDATIONS

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ABSTRACT

This study explores educational leadership within and across two of NZ's eLearning clusters. Two complementary perspectives of educational leadership are used to frame the investigation: instructional leadership and distributed leadership. The research was conducted approximately nine months after the cessation of a two-year Ministry subsidy for the employment of 12 ePrincipals and at a time when Ultrafast Broadband was imminent for nearly all NZ schools.

The literature review explores aspects of two areas related to eLearning leadership: conventional educational leadership in 'bricks-and-mortar' schooling contexts and eLearning/eTeaching in virtual schooling contexts. Data was gathered from semistructured interviews with twelve school-based research participants (ePrincipals, eTeachers, Site Supervisors and Principals) across two of NZ's eLearning clusters and four National Officials with responsibilities for wider forms of eLearning. The findings are presented in a manner that attempts to capture directly the research participants' voices, while still maintaining confidentiality and anonymity. The findings are discussed using an ecological perspective of eLearning as the unifying framework to explore the leadership across nested and interacting layers, from the micro-level of an eLearning class to the macro-level of NZ's system for secondary education.

The major findings from the study indicate that educational leadership in eLearning clusters is complex, relies heavily on goodwill and collaboration, and occurs in a challenging environment. Within an eLearning cluster the leadership of eLearning/eTeaching is distributed primarily across the ePrincipal, eTeachers and Site Supervisors who each assume complementary leadership roles. A raft of recommendations, across all ecosystem levels of eLearning, is proposed for leaders to consider when initiating change to strengthen their practices and policies with respect to enhancing eLearning and eTeaching.

CHAPTER SIX: CONCLUSION and RECOMMENDATIONS

CONCLUSION

This study sought to investigate how instructional leadership is distributed within and across two of NZ's eLearning clusters – a relatively straightforward notion which not only belied the complexity of the research but also that of the leadership itself.

The literature review (Chapter Two) identifies two complementary theoretical perspectives of educational leadership that are used to frame the investigation: instructional and distributed leadership. Several key instructional leadership dimensions were actively explored during the interviews, including: professional learning/development (Dexter, 2008; Hattie, 2009; Robinson, Hohepa, & Lloyd, 2009; Timperley, Wilson, Barrar, & Fung, 2007; Voogt & Knezek, 2008); monitoring and support for eTeachers (Dexter, 2008; Hattie, 2009; Robinson, et al., 2009; Roblyer, 2006); monitoring and support for eLearners (Dexter, 2008; Hattie, 2009; Robinson, et al., 2009; Roblyer, 2006; Schrum & Levin, 2009); preparation for eLearning and eTeaching (Roblyer, 2006); and instructional leadership across multiple clusters (Davis, 2008; Davis & Niederhauser, 2007; Roblyer, 2008; Zhao & Frank, 2003). In addition, the national context for eLearning/eTeaching was also investigated because this influences its leadership (Anderson & Plomp, 2008; Davis, 2008; Law, 2008; Law et al., 2008).

The findings (Chapter Four) from the interviews and other documents were collated and analysed according to the above key leadership dimensions. Overall, the findings show that:

- eTeachers' and Site Supervisors' professional learning/development is primarily collegial, informal and sporadic, rather than well-planned and well-aligned to their professional learning needs, goals and appraisals. Little, if any, use is made of student achievement data to inform eTeachers' PD and improve eTeaching;
- tensions between school and cluster systems meant that eTeaching is poorly monitored. Consequently eTeachers' feedback and support is informal and haphazard rather than part of an integrated and proactive system for professional appraisals/goal-setting and PD;

- the leadership for monitoring and supporting eLearners is distributed across Site Supervisors, eTeachers and, to a lesser extent, the ePrincipal. The systems they use are primarily aimed at ensuring students attend regularly, complete the work set and behave themselves, rather than being focused on students' learning. School and cluster systems for student goal-setting and self-monitoring to improve learning are not well developed or coordinated;
- the preparation of new eTeachers and Site Supervisors is mainly the ePrincipal's responsibility, with some support also being provided by more experienced eTeachers and Site Supervisors from within the cluster;
- the preparation of new ePrincipals was supported by the Ministry for 2008/2009 and included a combination of: experienced leadership mentors, PD courses, conferences and collegial support from other ePrincipals. Much of this support is no longer available for ePrincipals' ongoing PD needs, apart from the collegial support and ICTPD conferences;
- leadership for the preparation of new eLearners is distributed across ePrincipals, eTeachers and Site Supervisors. The systems they use are well established but tensions between school and cluster activities and inter-cluster enrolments reduce their effectiveness;
- instructional leadership across multiple clusters does not feature prominently for eTeaching but it does for eLearning because of the highly reciprocal nature of the eLearning clusters regarding student enrolments; and
- nationally, the main forms of support provided for eLearning and its leadership include: significant investment in the enabling ICT infrastructure, developing teachers' overall pedagogic practices and informal support for ePrincipals' PD through the formation of collegial communities of practice. Little, if any, national support is provided specifically for eLearners, eTeachers, and Site Supervisors.

Findings also emerged for several other leadership issues which arose throughout the research process. Whilst many of these appear to be discrete issues, some are connected and these connections appear to help explain why some aspects of the clusters' leadership are so complex and confused. Significant findings for other issues that arose during the interview process include:

- neither of the eLearning cluster's management committees appears to have a significant role in the instructional leadership of the cluster;
- the ePrincipal's role is open to interpretation and misunderstanding;
- almost all eLearning courses are NCEA courses which dictates teacher-centred pedagogy, requires stringent student selection policies and also stifles the development of more innovative eLearning courses;
- asynchronous technologies are affecting eLearning and eTeaching, possibly by causing the development of a more socio-constructivist pedagogy;
- most schools have rigorous selection policies for prospective students to become eLearners which inevitably results in inequitable access for students to eLearning;
- increases in cross-cluster enrolments of eLearners has extended the range of courses available to (suitable) students but is also accompanied by greater difficulty for the cluster-wide preparation of new eLearners;
- funding and sustainability concerns are widespread amongst ePrincipals and Principals but not shared by the National Officials who typically adopt a 'self-managing schools' rationale;
- inter-school collaboration in an environment that is geared almost exclusively to support self-managing schools is repeatedly identified as problematic and appears to be at the root of many of the tensions faced by the eLearning clusters; and
- the current national roll-out of UFB is identified as positioning NZ at the brink of a new educational paradigm with significant opportunities and challenges for NZ's schools. The rural secondary eLearning clusters are viewed as microcosms of the issues that are likely to soon be faced by all NZ schools.

The discussion of the findings (Chapter Five) confirms that the leadership of eLearning/eTeaching is a very complex and multi-faceted phenomenon which occurs in a challenging, multi-layered environment. The findings are analysed and discussed using an ecological perspective of eLearning for each ecosystem level; key elements of the leadership within each level are described and connections to other levels are also identified. A complex picture of the leadership emerges from the discussion, with different but interconnected and interdependent leadership roles and challenges within and across all of the ecosystem levels. The ecological perspective proved itself to be useful, not only as a unifying framework for discussing/analysing the findings but also for generating an array of interconnected recommendations at all ecosystem levels to inform and guide future improvements to eLearning/eTeaching leadership practices. These recommendations should be viewed as suggestions for the next phase in the ongoing evolution of eLearning, rather than as criticisms of the existing clusters.

RECOMMENDATIONS

In keeping with the interconnected and interdependent nature of the findings, the recommendations below are presented as two 'bundles' of interrelated suggestions to improve eLearning/eTeaching leadership practices. The first bundle is aimed at enhancing leadership practices and systems in the existing rural, secondary, NCEA-focused eLearning clusters. The second bundle represents a more radical viewpoint by offering recommendations for disruptive innovations to improve the leadership of eLearning in NZ. Recommendations for further research are then identified, before a final word regarding this research concludes the chapter and the thesis.

Recommendations to Improve eLearning Clusters

eLearning clusters should review their systems for monitoring and supporting eTeachers, Site Supervisors and ePrincipals. School and/or cluster systems for professional development, professional goal-setting and appraisals should be developed so that they are well-aligned with the professionals' learning needs and are cohesive, comprehensive and integrated. In turn, the professionals' learning needs should be informed by analyses of feedback from students about their learning and also student achievement data. Timperley et al.'s (2007) professional learning cycle (Figure 6 below) is suitable to use as the underlying framework for the development of cluster systems for PD in an eLearning context because it is a knowledge-building cycle that starts and ends with the identified learning needs of students. If this cycle is used as the foundation for eLearning clusters' professional development systems, professional goal-setting could be easily incorporated into Step 2 and appraisals would form part of the monitoring and reflection at Step 5.

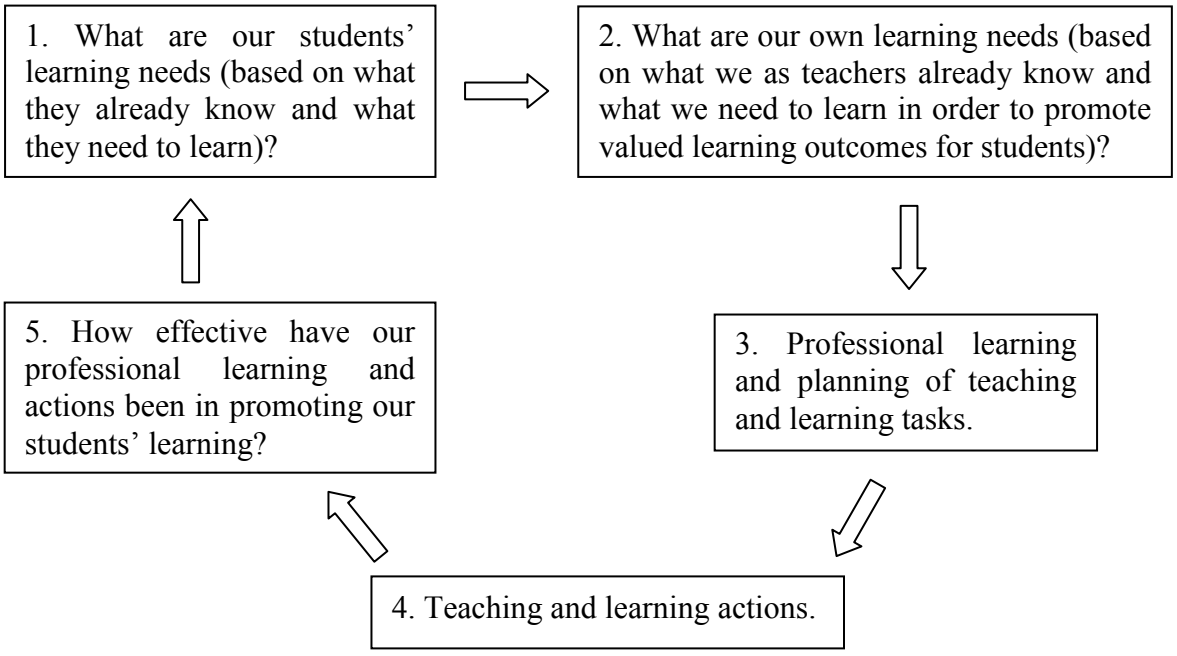

Figure 6: Timperley et al.'s (2007) Professional Learning Cycle

Regardless of whether or not this model is adopted, Principals and ePrincipals should play leading roles in the development and implementation of their systems to ensure school and cluster systems work in unison.

The formation of formal professional learning communities has the potential to further enhance the professional development/learning in Step 3 above (Dexter, 2008; Hallinger, 2003; Hopkins, 2003) but it would also add another layer of complexity to what is already a challenging issue and therefore carries some risk of making the system less effective.

Similarly, eLearning clusters should also review their systems for monitoring and supporting eLearners, particularly to develop well-coordinated systems for student goal-setting and self-monitoring (Means, Toyama, Murphy, Bakia, & Jones, 2009). Site Supervisors should play a leading role in the development of these systems to ensure that students' learning needs remain paramount. The smart use of ICTs should also feature in these systems to ensure that the school's deans and teachers, the student's eTeacher(s) and parent(s), the ePrincipal and the eLearning management committee are appropriately informed about the learning goals and progress towards them; systems for this reporting should be incorporated into Steps 1 and 5 of Figure 6 if this model for professional learning/development is adopted.

The eLearning clusters' management committees should also review their leadership roles, with a view to developing greater responsibilities for instructional leadership, particularly by adopting a much more strategic approach to improving student learning (Ministry of Education, 2011).

The Ministry of Education should review their systems/policies for the support of eLearning clusters. Specialised professional development/learning for eTeachers, Site Supervisors and ePrincipals should be provided nationally because these professionals are, or could easily become, technology leaders (Riel & Becker, 2008) within the schools thus increasing the return manyfold on the Ministry's investment. Ongoing streams of funding and/or staffing should be provided to eLearning clusters to enable them to develop and sustain the quality management systems described above, rather than allowing NZ's self-managing schools' system (which appears poorly designed for inter-school collaboration) to erode the quality and provision of eLearning opportunities. Finally, the Ministry should fund further development of the LCO Handbook (Ministry of Education, 2011) to provide detailed advice, with examples and resources, that describes and explains to schools and clusters how they can develop and sustain quality management systems for the effective monitoring and support of eLearners, eTeachers, Site Supervisors and ePrincipals.

Recommendations for Disruptive Innovations to Improve eLearning and its Leadership

Christensen (2009) adopts a business perspective when he defines a 'disruptive innovation' as a new product/service that "allows a whole new population of consumers access to a product or service that was historically only accessible to consumers with a lot of money or a lot of skill." This term applies equally to schools if education is considered to be a service and that students and their family/whanau are potential consumers of that service.

This research identifies that many students are denied access to eLearning because most schools apply rigorous student selection policies. The main underlying reason for this is that the courses are almost exclusively traditional teacher-centred NCEA level courses with predetermined structures and entry requirements. The overall effect of this is to deny many students access to eLearning. However, as Christensen (2009) observes, this also makes eLearning fertile ground for a disruptive innovation, particularly if the barrier of perceived perquisite students' skills is removed to allow more open access.

The clue for how to achieve this is provided by the eLearning literature which contains recurring themes of constructivist pedagogy, personalised learning and 21st century learning skills (e.g. Lin & Bolstad, 2010). Constructivist teaching and learning strategies that are enabled through the innovative use of ICTs typically aim to develop students' abilities to: construct new knowledge, think creatively and critically, solve problems, communicate with others and make connections. Importantly, these are all skills which every student could and should develop.

However the National Officials in this research quite rightly identify that little progress has been made towards developing innovative teaching and learning programmes by NZ's rural secondary eLearning clusters. Hence a disruptive innovation in eLearning may be required to make it more easily accessible to those students who are currently denied access because they are perceived to lack the prerequisite skills.

Research participants identify the current national roll-out of UFB as a timely opportunity to develop more innovative eLearning programmes and that this is likely to occur through faster connectivity and enhanced inter-school collaboration in a more networked schooling environment. However, the experience of the current eLearning clusters would suggest that this is unlikely because they have networked and collaborated for some time, with little evidence of innovative practice. This also reflects international experience because the literature shows that efforts to transform traditional schooling through the adoption of ICT have in the main been unsuccessful (e.g.Voogt, 2008). Conversely virtual schooling has undergone rapid and successful growth (Roblyer, 2008).

Davis and Roblyer (2005) argue that the underlying driver for the growth of virtual schooling in the USA has been due to a fundamental shift in student demand, primarily from rural/underserved students wanting better access to a wider range of courses to nearly all of today's students who demand anytime-anywhere access to self-paced, flexible and connected learning programmes. Furthermore Davis and Niederhauser (2005) find significant advantages of delivering virtual schooling through a specialised virtual school compared with the 'coordinated schools' model used by NZ's eLearning clusters.

This strongly suggests that there is much to be gained if NZ focuses on virtual schooling opportunities that are enabled by UFB and that a disruptive innovation should be adopted which is specifically designed for providing easy access to personalised, 21st century eLearning opportunities to every student. However it must be acknowledged that this recognition comes loaded with a raft of inherent implications for national educational policies that would also need to be addressed, including:

- legislation enabling (or requiring) student rights to enrolment with multiple schooling providers;
- regulations that describe and explain school's rights and responsibilities for student learning in a multiple-schooling environment and also the resources/systems that enable them to perform their functions;
- changes to funding and staffing formulae for all schools which acknowledge and reward those who provide for students' learning;

- resourcing implications (such as access to computers and UFB) to enable access for all students to synchronous and asynchronous eLearning opportunities, from their homes and schools;
- parental access to their children's records of learning/eLearning and to their schooling providers; and
- changes to the NCEA qualification system that recognise a wider range of students' skills (e.g. constructing new knowledge, thinking creatively, and working collaboratively to solve problems) and/or reduce the assessment demands on students in Years 11, 12 and 13.

A wide range of virtual schooling providers are evolving in the USA (Watson, Gemim, Ryan, & Wicks, 2009) so there are many options available for developing virtual schooling further in NZ. One approach may be to change national educational policies to encourage the establishment of many virtual schooling providers that specialise in unique or niche forms of personalised eLearning such as PLENK (Downes, Siemens, Cormier, & Kop, 2010). This suggestion would diversify the virtual learning opportunities and reduce the risk associated with backing a single provider but it would also dilute the resources unduly and possibly preclude the development of resource-intensive innovative programmes such as Conspiracy Code (Florida Virtual School, 2011b) where students learn about American history through an online gaming programme.

Furthermore, the development of virtual schooling should be considered within an international educational context rather than just a national one. For example, Florida Virtual School currently offers: franchise opportunities for schools to establish their own virtual school, learning opportunities to students in 46 different countries and virtual leadership training for educators globally (Florida Virtual School, 2011a). This not only implies that international virtual schooling providers could be part of NZ's delivery of virtual schooling but that international opportunities would exist for NZ's virtual schooling providers if they were to develop world-class programmes either independently or in collaborative partnerships with international VS providers.

Rather than attempting to provide an exhaustive list of suggestions, I recommend that the Ministry of Education completes a thorough investigation into potential models of virtual schooling and their implications. This review needs to be completed urgently so that the Ministry can put their recommendation(s) to the government for a timely decision, thus ensuring that the investment in UFB provides an optimal educational return for all NZ students.

Further Research

As already noted in the literature review, there is currently a dearth of research in the fields of:

- eTeaching and eLearning, particularly in primary and secondary schools (Means, et al., 2009);
- educational research that is focused primarily on distributed leadership in action (Harris, 2009; Spillane, Camburn, & Pareja, 2009); and
- and the leadership of virtual schooling (Roblyer, 2008).

This research project has done little to rectify this situation because of its limited methodology and scope; hence more research of this nature is still required.

Furthermore, this research has raised several specific unanswered questions at all ecosystem levels of eLearning in NZ that are worthy of further research in the future. For example, at the eLearning class level, what examples of innovative and constructivist teaching practice exist and how may these be promoted and nurtured elsewhere?

At the individual school level, how do schools' student selection policies/procedures affect participation and success in eLearning? What conditions are required to promote and sustain effective student goal-setting and self monitoring? How can teaching and learning strategies developed for eLearning be used to enhance blended learning in face-to-face classes?

For individual eLearning clusters, what effective leadership roles are performed by ePrincipals and eLearning Management Committees for enhancing eTeaching/eLearning? Do effective systems and structures exist for eTeachers' and Site Supervisors' professional development, appraisals and goal-setting? If so, what conditions are required for these to be promoted and sustained in all eLearning clusters? How can clusters promote the development of innovative courses and eTeaching practice?

Across multiple eLearning clusters, how does inter-cluster instructional leadership influence eTeaching and/or eLearning, and how can this be enhanced further?

At the level of secondary education in NZ, which form(s) of virtual schooling models used internationally are most effective for enhancing student learning? What is/are the best option(s) for developing virtual schooling in NZ? What are the educational policy implications of enhanced inter-school collaboration in a 'networked-schools' environment? Do fixed-term Ministry subsidised collaborative initiatives provide good long-term returns on the investment?

A Final Word

"Ki ngā whakaeke haumi" which literally means "join those who can join sections of a canoe" (Landcare Research Manaaki Whenua, 2003). The background to this Māori proverb is that some canoes consisted of two or three sections and that joining them required considerable skill and great teamwork. This proverb implies that difficult and complex tasks are best achieved by leaders who have a clear vision of the big picture, understand how the component parts work and who possess the team leadership skills required to lead diverse groups that are working collaboratively.

The parallels of the proverb for the leadership of eLearning (at all ecosystem/canoe-section levels) are self-evident. Leaders who seek to improve eLearning, be they at school, cluster or national level, irrespective of whether they lean more towards improving current eLearning clusters or more radical options, will only be successful if they are able to galvanise diverse groups of people into effective teams. Hence improving eLearning will ultimately depend upon leaders with the instructional knowledge and the distributed leadership skills to achieve it.

As has already been stated elsewhere throughout this thesis, I have the utmost respect for, and confidence in, the leaders of eLearning so it is with a sense of optimism and anticipation that I await future developments in the ongoing evolution of eLearning in NZ.

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