

# Virtual Learning as an Impetus for Educational Change: Charting a Way Forward for Learning in New Zealand

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## Abstract

New Zealand has a long history distance education in the schools sector, beginning with The Correspondence School over 90 years ago. Similar to many jurisdictions, as technology has evolved the schools sector has also evolved in how it has used that technology to provide learning opportunities at a distance. Each technology – from the print-based correspondence model to the current Internet-based virtual learning model – has forced educators to re-think how these educational opportunities are structured and delivered. Over the past two years, there have been significant events within the virtual learning community in New Zealand that place it on the cusp of being the catalyst for a fundamental re-thinking of how all education is delivered within the schools sector. In this report, we outline the history of distance education in New Zealand. We also describe two recent reports that outlined potential future directions for virtual learning organizations in New Zealand. Finally, we consolidate those visions – along with recent educational developments – to chart a vision for the future of education in New Zealand through virtual learning.

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## CORE Education's Research Reports

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## Introduction

The past two years there have seen significant changes in the provision of virtual learning in the schools sector in New Zealand. During 2010 the Ministry of Education, along with CORE Education, revised and updated the *Learning Communities Online Handbook* – a document designed to provide e-learning clusters with guidance as they moved on their journey from a conceptual idea to a mature and sustainable cluster (Ministry of Education, 2011). The Ministry of Education also announced its plans for the Ultrafast Broadband in Schools (UFBiS) initiative that will ensure Internet access to 95% of the nation’s schools by 2016 (Ministry of Education, 2012). In 2011, the Distance Education Association of New Zealand (DEANZ) commissioned a study into the development of virtual learning in New Zealand (Barbour, 2011), while the Virtual Learning Network-Community (VLN-C) commissioned CORE Education provide future direction to this national virtual learning organisation (Wenmoth, 2011). Later in the year, the Ministry of Education announced that it would create a Network for Learning (N4L) to provide significant tools and resources for schools (Ministry of Education, 2012). Finally, this year a Parliamentary Inquiry into twenty-first century learning environments and digital literacy was conducted (New Zealand Parliament, 2012).

The purpose of this white paper is to examine the current state of virtual learning in the schools sector, as well as chart a vision for the virtual learning in 2016 and beyond (i.e., following the completion of the UFBiS initiative). In this document, first, we trace the history and development of the main types of providers of distance education to establish the context for the current provision of online distance and blended learning in New Zealand. Second, we examine the organisational models designed to allow for the continued development of these initiatives. These models are outlined in the DEANZ’s report entitled *Primary and Secondary e-Learning: Examining the Process of Achieving Maturity* and the CORE Education report entitled *Business Case: Virtual Learning Network Community (VLN-C)*. Finally, we consolidate and expand these two organisational models to chart a specific vision for the future of education in New Zealand’s school’s sector.

## Background and History of Primary and Secondary Distance Learning in New Zealand

New Zealand has a long history of distance education in the schools sector. There are five main types of providers that are currently responsible for the delivery of distance education, including online and blended learning, in the schools sector in New Zealand: *Te Aho o Te Kura Pounamu*/The Correspondence School (The Correspondence School/Te Kura); approximately 20 Virtual Learning Network (VLN) e-learning clusters; three regional health schools; 13 urban-based, regional loops; and some tertiary institutions.

In this section, we trace the development of these groups both to provide a context of the current state of online distance and blended learning, and to give the reader an understanding of how we have arrived at the current situation.

The introduction of distance education to the schools sector began around 1922 with the introduction of The Correspondence School (Rumble, 1989). During its first year of operation, The Correspondence School served approximately 100 primary students and “all the lessons and letters to students were written by hand by the School’s first teacher, Miss Janet Mackenzie” (The Correspondence School, n.d., ¶ 1). By 1928, the school had grown to 720 primary students and the first group of secondary students was admitted with an initial cohort of 50 students. The 1930s saw the roll of The Correspondence School grow to approximately 2000 students, and it also saw the introduction of educational radio broadcasts as a part of school’s delivery model. Sixty years later, The Correspondence School was also among the first in the schools sector to experiment with video conferencing in the 1990s (Roberts, 2009; Wenmoth, 2005), and began to offer online courses through the VLN brokerage site in 2009 (Roberts, 2010).

The Correspondence School was not the only schools sector organisation to explore e-learning and virtual learning options during this time. In 1992 the New Zealand government commissioned the *Consultel Report* (Buckrell et al., 1992), which explored how recent developments in telecommunications technology might be used for learning in

all sectors. It was around this time that many rural area schools were facing challenges with providing a wide range of curricular opportunities, particularly in the senior secondary levels. These challenges led seven area schools in the Canterbury region to create the Canterbury Area School's Association Technology project (CASAtch). By the beginning of the 1994 school year these seven area schools were linked by using an audiographics system, with each school allocating a teacher to teach one course and students then, from any of the seven schools could enrol in that course (Wenmoth, 1996). The audiographics technology allowed the schools to be linked together and for the courses to be distributed among the participating schools. In 1996, three secondary schools joined CASAtch and the project was revised as the Canterbury Technology Schools Project (CANTAtch).

The *Kaupapa Ara Whakawhiti Mātauranga* (KAWM) project began in 2000 and was the first e-learning cluster to develop (Roberts, 2009). The KAWM project:

*focused on using information and communication technologies to strengthen curriculum delivery and broaden options for Maori learners in schools, including boarding schools... [and addressed] the shortage of Maori-medium subject specialist teachers at the secondary level through the provision of 'expert teachers' to provide lessons via video conferencing across a number of Wharekura sites.* (Stevens & Moffatt, 2003, p. 131)

The KAWM project eventually grew to include five clusters (Waiti, 2005), and more than 20 schools from Kaitaia to Invercargill (Roberts, 2009).

Following the creation of CANTAtch, the next region to form an e-learning cluster that included the provision of distance education was the Otago region. The OtagoNet e-learning cluster was first established in 2000 by the Community Trust of Otago as a partnership between seven schools to create a learning community for teachers (Treadwell, 2010). Like many of the e-learning clusters, its main intent when it was created was not necessarily the provision of distance education. In the case of OtagoNet, the vision was "to create a broadband VLN linking the Otago Secondary and Area Schools, to strengthen existing relationships and collaboration of these rural and geographically dispersed schools" (Pullar & Brennan, 2008, p. 9). More recently, Lai and Pratt (2009) described the OtagoNet as a small cluster of nine rural schools – ranging from between 10 and 275 high school students – in a region that has an average of 15 people/kilometre<sup>2</sup>.

FarNet was another one of the early e-learning clusters that developed. It began in 2001 as one of four pilot projects funded under the Digital Opportunities Programme (DigiOps) (Stevens & Moffatt, 2003), with an initial community of 10 area and secondary schools in Northland (Bennett & Barbour, 2012). The purpose of the FarNet e-learning cluster was to create a virtual professional development community that used a dedicated website to foster the learning communities (Rivers & Rivers, 2004). One of the consequences of this project was that it allowed the participating schools to obtain the necessary hardware and software, as well as the expertise among the teaching faculty, to be able to leverage these tools for later use in distance education (Parr & Ward, 2005). One of things to notice about the FarNet e-learning cluster was that the cluster was not primarily developed for the purpose of delivering distance education. In fact, it wasn't until it entered its second phase of development – following the completion of the project outlined under the DigiOps funding – before FarNet began to offer distance education. This was a common trend among some of the early e-learning clusters, many of which were also created under a variety of national funding programmes (Powell & Barbour, 2012).

At the time of the development of the OtagoNet Cluster and the first real use of video conferencing to enable the connection between schools, the eSection at The Correspondence School was established to transition the print-based activity of the Correspondence School to a virtual learning environment. The OtagoNet cluster approached the eSection to assist with providing assistance with courses they weren't able to provide locally. From this initial relationship an initiative – in partnership with the Ministry of Education – developed to formally organise the existing e-learning clusters into a larger, national effort known as the VLN (Wenmoth, 2011). The VLN was designed to provide a brokerage service where participating clusters could advertise the courses they were offering and make them available to schools in other regions. The VLN also provided the mechanism where initially The Correspondence School, and later the Ministry of Education, provided centralised services – such as a video conferencing

bridge and asynchronous e-learning tools (e.g., a learning management system, an e-portfolio system, etc.); while the individual e-learning clusters would be responsible for using these tools to provide online distance education and other services based on their individual, local needs. In addition to the brokering of services, in 2004 The Correspondence School and the Ministry of Education also provided the initial version of a *Learning Communities Online Handbook* to assist schools in the formation of e-learning clusters. This document provided those interested in forming a cluster, or leading existing clusters, a matrix to guide development through the phases from initial conception to implementation.

Following the development of these e-learning clusters, along with the creation of the VLN, many have argued that various information communications technology (ICT) strategies put in place by the Ministry of Education have accounted for the growth in the effective use of ICT to support learning and teaching (Bolton, 2008; Cowie, Jones, & Harlow, 2008; Dewstow & Wright, 2005; Sahin & Ham, 2010; Wright, 2010); while others have argued that the funding programmes that accompanied these strategies, and other policy documents, have created a framework to encourage the growth of the VLN e-learning clusters and the use of virtual learning (Powell & Barbour, 2011). One such funding initiative in 2007 was the provision of 18 administrative salary units to support the leadership of the e-learning clusters (known as ePrincipals). The purpose of these ePrincipals was to lead the various e-learning clusters, to build relationships with other clusters, and to move the cluster towards a sustainable model of development over the 2008 and 2009 school years. Roberts (2010) described the specific tasks of the ePrincipal as:

- › develop and refine policy and procedure for the delivery of online learning
- › share best practice
- › provide professional learning opportunities for teacher
- › develop student support networks and structures
- › set up programmes such as Scholarship Mentoring, and Gifted and Talented programmes
- › identify areas for innovation
- › support research
- › explore opportunities to include the wider community
- › support new schools and clusters as they join the VLN. (p. 148)

In a recent examination of the leadership of e-learning clusters, Stevens (2011) found that the responsibilities of the ePrincipal were open to interpretation by the individual who held the position. Further, Barbour's (2011) evaluation of the sustainability and maturity of New Zealand's e-learning clusters, concluded that "based upon the current responsibilities assumed by the ePrincipals, the Ministry of Education is justified to not provide funding for approximately 15 ePrincipals. The business case simply does not exist" (p. 40). The fact that the ePrincipal model was based on funding provided directly from the government, with no mechanism for the contribution of funds from the individual schools or clusters, combined with a lack of a coherent view of the role of the ePrincipal, contributed to why the funding for this initiative was not continued following the 2009 school year. Even following end of the external funding for the ePrincipal, in a study of educational leadership in two of the VLN e-learning clusters, Stevens (2011) found that the role of the ePrincipal was "complex, [relied] heavily on goodwill and collaboration, and [occurred] in a challenging environment" (vi). Stevens underscored the unsystematic nature of the role by recommending that "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" (p. 112). This was similar to Barbour's recommendation that the role of the ePrincipal become more defined.

At present, the VLN represents approximately 20 individual e-learning clusters (Compton, Davis & Mackey, 2009). In 2009, it was reported that these clusters were brokering over 160 online courses and related professional and organisational development (Bolstad & Lin, 2009), representing 1401 student enrolments from 252 schools, in 212 different courses, taught by 154 different distance or e-teachers (Roberts, 2009). In April 2010, the Virtual Learning Network-Community (VLN-C) was officially constituted to formalise and extend the co-operation between the individual e-learning clusters (Wenmoth, 2011). Some rationalisation has begun to occur within the VLN, for

example the former CANTatech and AorakiNet e-learning clusters have merged to form the CantaNet e-learning cluster. Further, new funding initiatives to explore the potential of blended learning have even encouraged the development of super clusters, such as the cooperation of 30 schools from the CantaNet and WestNet clusters to form the Southern Central Divide Information Communications Technology Professional Development (ICTPD) cluster (Parkes, Zaka, & Davis, 2011). In addition to the virtual learning provided by the VLN e-learning cluster, several tertiary institutions have also begun providing secondary courses through the VLN brokerage site (e.g., Matua Raki, NatColl, NorthTec, Otago Polytechnic, Telford Rural Polytechnic, Waikato Institute of Technology, etc.).

Many of the distance education initiatives to date have focused on students attending schools in rural and remote jurisdictions; however, this is not true of all of the distance education initiatives. Roberts (2010) reported that in 2009 the DunedinNet e-learning cluster had begun to offer online courses, as well as Wellington High School. More recently a group of schools in the Auckland area have come together to form the HarbourNet e-learning cluster, which began offering a series of distance education courses during the 2012 school year. In addition to urban-focused e-learning clusters, is the development of urban-based loops. For example, in 2005 school-based leadership in the Nelson region led an initiative to connect all of the Nelson area schools to a fibre-based loop – known simply as the ‘Nelson Loop.’ This loop was able to provide the schools with reliable, high speed Internet access (Zwimpfer, 2010). This was followed by similar initiatives in Wellington, the North Shore in Auckland and in Christchurch (known as the Wellington Loop, the North Shore Education Access Loop, and the Greater Christchurch Schools Network respectively).

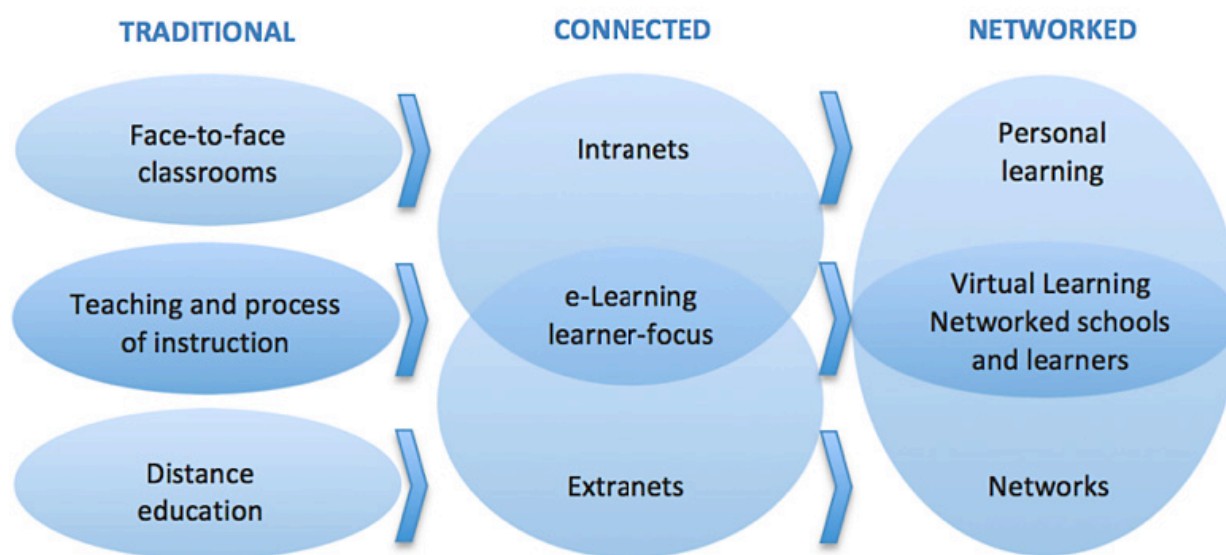
Most of these, primarily urban, clusters or loops of schools have been started as a result of, or with the assistance of, an economic development grant from central government, local councils or regional trusts. However, each has adopted strategies to make them sustainable through contributions from member schools or support from regional development monies. In 2007 five regions in New Zealand were allocated funding from the Broadband Initiative Fund to enable them to implement a regional broadband trial. Educators from each region formed an alliance to ensure that the needs of schools became a primary focus of the activity in each region. This small group of the original urban loops formed the SuperLoop Group to provide an informal connection between educators in each of the five regions as a means of exchanging ideas and experiences. The SuperLoop group met together at infrequent intervals as required to formulate a coordinated and strategic approach to various themes or issues, common to all areas, and has developed position papers to help inform Ministry of Education thinking and briefing papers. The SuperLoop has established itself as a representative group of mostly urban schools in 12 regions, and also includes representation from the VLN-C, all of who are pioneering and/or planning the collaborative development and use of the UFBiS networks that are being rolled out by the government in New Zealand before the end of 2016.<sup>1</sup>

Finally, there has have been numerous other e-learning and ICT initiatives established in New Zealand in recent decades. Many of these initiatives began around the same time as the CASatech initiative, prior to the establishment of the VLN (and many of its early e-learning clusters). Some of these have even included aspects of virtual learning, and even those that did not include this method of instructional delivery often provided valuable lessons for future initiatives. For example, the linking of Stratford High School to Taranaki Polytechnic (Stevens, 1994), the North Shore Schools Net and the South Auckland Schools Net (Selby, Ryba & Falloon, 2005), and the Top of the South Island technology project or TOSI tech (Stevens, 1995), just to name a few. Each of these pioneering initiatives, regardless of the presence of virtual learning, provided guidance to the VLN e-learning clusters that would follow.

One of the overarching visions that have guided the development of many of these initiatives – although not always in an obvious way – was the goal to use distance education and virtual learning as a way to transition the schools sector from a “traditional” view of educational delivery to a “networked” view of educational delivery.

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<sup>1</sup> See <http://www.superloop.org.nz> for more information concerning the SuperLoops.



*Figure 1. A vision of networked schools (Wenmoth, 2010)*

In traditional schools, the student was enrolled in either a face-to-face school or a distance education programme. The origins of The Correspondence School, where students who were enrolled in the school did not attend a brick-and-mortar school and completed all of their education at a distance, is a good example of traditional schools. The past two decades have seen an evolution of that model where there is an overlap between the physical school and the distance learning opportunities. In these connected schools students attend a school, but may take one or more courses through one of the VLN e-learning clusters or another distance learning provider. The next stage in this evolution is networked schools, where the integration of face-to-face learning and virtual learning has become seamless and an onlooker would have difficulty in determining if students were learning in a face-to-face or online context.

## DEANZ report – “Primary and Secondary e-Learning: Examining the Process of Achieving Maturity”

During the 2011 school year, Dr. Michael Barbour of Wayne State University (Detroit, Michigan) spent two and a half months in New Zealand to examine the development of the VLN e-learning clusters and the barriers these clusters faced in achieving sustainability and maturity (Barbour, 2011). The data collected included observations of students and teachers engaged in synchronous and asynchronous distance learning, interviews with students, teachers, administrators, school-based personnel, and cluster leadership, and document analysis. Based on this data, along with his knowledge of North American organisational models, Barbour recommended a significant re-organisation to the way primary and secondary online learning was structured and supported. The organisational model that Barbour recommended was focused upon expanding the brokerage role of the Ministry of Education, providing more regional support to allow for greater regional cooperation, and continuing to provide individual e-learning clusters the flexibility to address local needs.

### Expanding the brokerage role of the Ministry of Education

At present, the Ministry of Education provides a brokerage of services that are focused on tools. The Ministry currently supports a videoconferencing bridge that allows many of the VLN clusters to conduct their synchronous instruction. The Ministry also provides support for the learning management system (LMS) Moodle, along with a variety of other tools that could be used for asynchronous online instruction. Finally, the Ministry provides a registration system that allows schools to enrol their students into distance courses – both from the cluster that they

may be a member of and also from other clusters that may have excess capacity (see <http://pol.vln.school.nz/>). As Barbour described, the individual VLN clusters are responsible for course development and, in many instances, the teachers from those individual clusters had independently created multiple versions of the same course. This has resulted in two and three and four and five and, even, six different versions of a course being developed; which is a considerable waste of resources. Barbour recommended that the Ministry's brokerage services be expanded to include the consolidation and further development of an online course content repository.

The Canadian Province of Ontario underwent a similar process approximately six to eight years ago. Within the province, there were 15-18 district-based distance education programmes that had developed independently to address local needs that had reached the point where these programmes were beginning to cooperate more with the sharing of students for enrolment purposes. As a part of the Ministry of Education's desire to create an environment that would facilitate the growth and expansion of this method of educational delivery, the Ministry obtained copies of all of the existing asynchronous course content from these individual programmes. The Ministry then contracted subject area specialist teachers to take all of the versions of each course (e.g., a mathematics teacher would be responsible for all of the versions of the grade 9 math course) and create a single course. The single course was designed to use the best portions of the individual courses, along with the addition of newly developed portions for topics that were weaker or missing. The Ministry took these master courses and provided them back to the individual programmes free-of-charge. Recently, the Ministry allowed those teaching face-to-face courses access to the content, which allows those teachers to blend their students' learning. The Ministry of Education in provinces of Newfoundland and Labrador, as well as New Brunswick, also provide an online course repository that online or face-to-face teachers can use.

This is a process that the Ministry of Education in New Zealand could undertake. The Ministry could request each of the VLN e-learning clusters to provide a complete copy of their entire asynchronous course content. The Ministry could then work with the clusters to identify existing eTeachers that would be appropriate contractors to consolidate this content into a single, master course that could be provided back to the clusters at no cost. The Ministry could also assume the responsibility for future course development, in conjunction with the needs of the individual clusters, based on surveys of the member schools. This course development process would continue until content had been created for all courses in the New Zealand curriculum. A process of curricular re-development would also need to be put into place, with revisions suggested by the teachers using the course content and periodic systematic reviews of content being a part of that process. In addition to the e-learning clusters, the content – as well as the synchronous and asynchronous online tools – could also be provided to face-to-face teachers that wished to implement blended learning in their classrooms.

## Providing more regional support to allow for greater regional cooperation

As noted earlier, from 2007 to 2009 the Ministry of Education provided funding for 18 administrative positions for the leadership of the various VLN e-learning clusters. Barbour noted that each of the individual ePrincipals, along with the principals and deputy principals from schools participating in various e-learning clusters, all spoke of the need for one or more funded leadership positions with the e-learning cluster. However, as Barbour also noted the full-time equivalent enrolment for the individual e-learning clusters ranged from a low of 8-10 students to a high of 300-400 students. The allocation of a full-time administration position to each cluster, regardless of the number of students involved, resulted in anomalies in terms of workload and scope of responsibility.

Yet Barbour did recognise the value of regional leadership that had a closer proximity to the individual e-learning clusters and was able to understand the local needs of each cluster. As such, it was recommended that the Ministry of Education fund five to eight part-time or full-time regional coordinators responsible for specific geographic regions. These regional coordinators would be tasked with encouraging greater rationalisation of e-learning providers; cooperation with the sharing of resources and the opening of spaces to students from outside of the individual clusters; and collaboration of eTeachers, eDeans and other school personnel for professional development and student learning. Additional responsibilities could also be determined in conjunction with the VLN-C.

As with the previous section, there are similarities between this model and the one that is in place in the Canadian Province of Ontario. At present, the Ministry of Education provides funding for six Regional e-learning Contacts (ReLCs). The responsibilities of the ReLCs is to:

- › assist with organising e-learning programme delivery among boards, consortia and ministry
- › promote and increase the use of the provincial LMS and the Ontario Resource Educational Resource Bank (OERB) to reach more students, and
- › provide technical and training support. (e-Learning Ontario, 2012)

It is worth noting that the Province of Ontario is four times the size of New Zealand, and has three times the population. In addition to these six ReLCs, many of the individual virtual learning programmes have come together to form consortium to encourage cooperation between individual programmes. At present, five of these consortiums exist:

- › the Ontario eLearning Consortium – composed mainly of the original school districts<sup>2</sup> involved in virtual learning when e-Learning Ontario was first formed and currently includes 20 public and Catholic school districts
- › the Ontario Catholic eLearning Consortium – composed of the publicly-funded Catholic school districts involved in virtual learning and currently includes 29 school districts
- › the Northern eLearning Consortium – composed of school districts located in the northern portion of the province involved in virtual learning and currently includes 15 public and Catholic school districts
- › the *Consortium d'apprentissage virtuel de langue française de l'Ontario* – composed of the French-language school districts involved in virtual learning and currently includes 12 school districts
- › the Conference of Independent School's eLearning Consortium – composed of independent or private schools involved in virtual learning and currently includes 16 schools.

Each of these consortiums has a coordinator, most of whom have an allocation of half-time or less to undertake their responsibilities. Finally, each school district has a Ministry-funded e-Learning Contact (eLC) or individual responsible for coordinating the virtual learning activities within their individual school district. Individuals who are assigned as eLCs vary in their allotment of time from their eLC duties being their full-time load to those responsibilities being simply one portfolio that the individual is responsible for (often based on the extent of the school district's virtual learning activities).

## Continuing to provide individual e-learning clusters flexibility to address local needs

Historically, each of the VLN e-learning clusters was initiated to address one or more specific local needs. In some instances, this was due to the criteria of a particular request for proposals from some national funding scheme. However, in many instances the needs being addressed were genuine needs that the geographic collection of schools felt existed. The growth of the VLN from two or three isolated clusters to approximately 15-20 individual e-learning clusters is an illustration of the importance of addressing local needs through the initial developmental stage. Barbour indicated that it was important that this local connection was not lost.

While there was a call for a greater level of services to be provided at the national level, as well as the creation of regional coordinators and a call for increased rationalisation of the existing e-learning clusters, it was recognised that the needs of local schools could not be met solely through a centralised, national structure. There was a need for local e-learning clusters that were organised around geographic or like-minded visions (e.g., boys schools, character schools, Māori schools, etc.). These e-learning clusters would continue to focus their activities on addressing the local needs of their participating member school, regardless if those geographic needs were based on com-

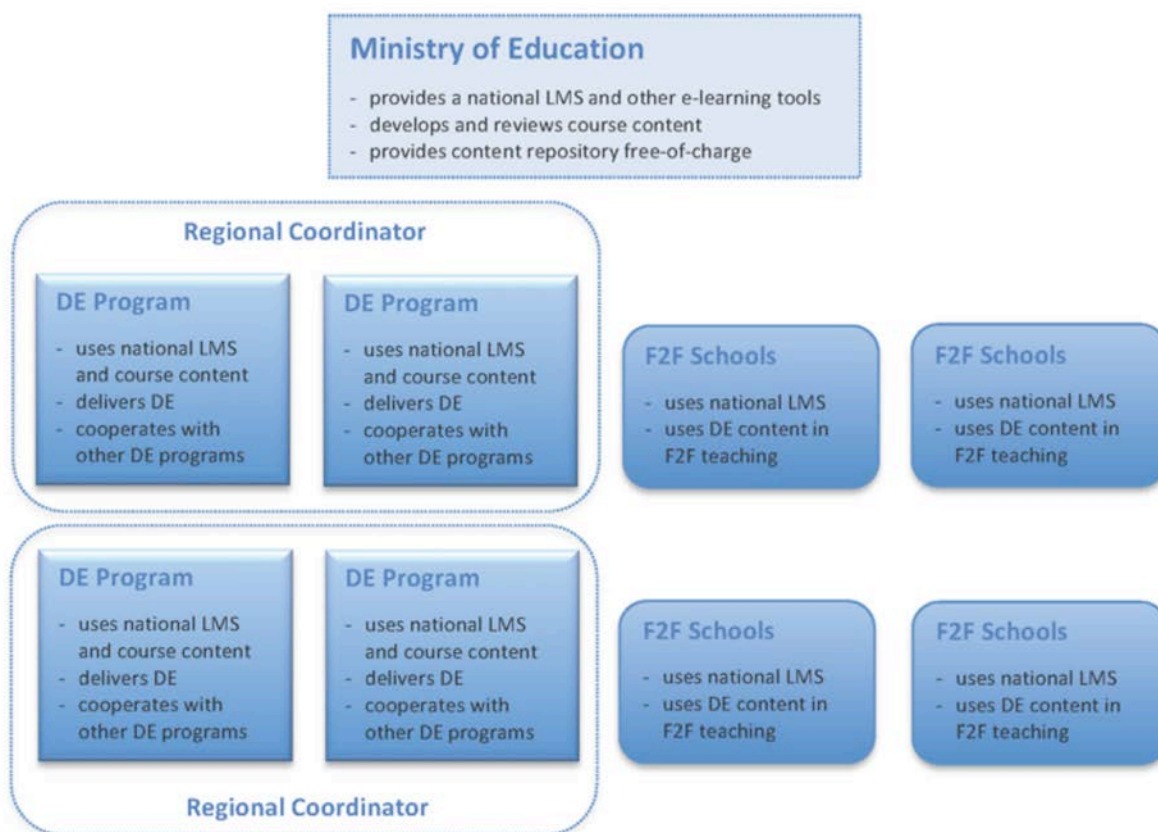
<sup>2</sup> North American school districts are generally geographically centred or focused, but can range in size (both number of students and schools).

mon challenges due to a shared geography or on a common mission between schools that were geographically dispersed.

As with the two previous sub-sections, the Canadian province of Ontario provides a useful model. e-Learning Ontario provides access to an LMS and asynchronous course content, and the Ministry of Education also funds the six ReLCs. However, it is the responsibility of individual school districts or the cooperation of two or more school districts to provide distance education to students attending their schools. This allows the individual districts to make decisions about which courses their local schools are unable to offer on their own, but are in high demand. In these instances the school district’s online learning programme would attempt to offer those courses via distance. In other instances there may be courses that a few students need or desire, that the school district’s online learning programme could seek to purchase or barter a space for those students in the online learning programmes offered by other school districts. While school districts are organised geographically, there are also five consortiums of school districts to address thematic or like-minded needs that have organically developed.

## Summary

These three general organisational themes, if enacted, would lead to a system of primary and secondary distance education as shown in Figure 2.



**Figure 2. Organisational structure recommended by Barbour (2011)**

As described earlier, the Ministry of Education would continue to provide access to and support for synchronous and asynchronous e-learning tools, along with using the existing asynchronous course content as the basis to create a national content repository that could be used – free-of-charge – by both distance education programmes and traditional face-to-face (F2F) schools. Further, the Ministry of Education would fund a series of regional coordinators designed to assist the leadership of the individual VLN e-learning clusters in cooperating and collaborating

with other clusters. The existing e-learning clusters would continue to exist as a way to address local needs, which could be geographic or thematic in nature. However, it would be desired that there would be some rationalisation of these clusters to decrease the number of small, geographic-focused clusters.

## **CORE report – “Business Case: Virtual Learning Network Community (VLN-C)”**

In 2011 the VLN-C commissioned a business case to be prepared that examined the future organisational and legal structure of a sustainable VLN-C. The timing of this request came shortly ahead of a review of the current funding support for the VLN, and the Ministry of Education were looking to the VLN-C to provide a substantive case for why funding should continue. The VLN-C decided to engage an external reviewer in order to provide a more objective and formally developed business case. The options that were presented as a basis for moving forward included the following models (Wenmoth, 2011).

### **Option one: Establish the VLN as a business unit within the Ministry of Education**

This would involve the Ministry of Education taking responsibility for treating the operation of the VLN as a part of its own internal operations in providing services for schools. Funding would be provided through an annual (or three-year) appropriation that supports all areas of activity of the VLN, including the VLN-C and VLN-Information Services. The VLN-C council would exist as an expert reference group to the Ministry of Education, and as a professional coordination and advocacy group within the VLN-C. This option would guarantee on-going funding for the VLN and allow the VLN-C to remain influential at a national level, while focusing attention on operational issues and support. However, the overall locus of control would shift to the Ministry of Education.

### **Option two: Establish the VLN-C Trust as an independent business unit (company)**

This option would enable the collection of clusters nationally to operate in a federated sense – consistent with the notion of a “fractal” organisation, or “network of networks.” This would require the VLN-C to establish a fully self-funded model, with funding coming through a variety of channels, including individual membership fees, cluster membership fees and fees for service through the brokerage model. The national organisation would act as a broker on behalf of the member organisations/clusters, leveraging the scale of membership to negotiate deals on services for members. The business unit would coordinate the provision of advice for members, negotiating and providing professional development and other consulting services. A formally established governance model would be required, with a board and operations staff employed by the company. This could be an extension of the current VLN-C council under its current constitution, but with paid staff. This option enables the VLN to operate independently from the Ministry of Education, in a sustainable business model.

### **Option three: Establish the VLN Trust as a professional organisation**

The primary focus in this option is on representation and advocacy, along the lines of other professional organisations such as Telecommunications Users Association of New Zealand (TUANZ). This is essentially a representational model, focused on advocacy and influence. The interests of the constituent members are “held in trust” by the elected members of the professional organisation (i.e., a trust). Funding for this model would come from the payment of a membership fee, paid by individual or cluster members. As a professional organisation funded by members the VLN would be able to provide an “independent voice” on matters relating to the operation of the clusters, and be strongly represented in all policy and strategy development. They could also be strategically aligned with

other professional organisations such as DEANZ or the Australasian Association of Distance Education Schools (ADES).

## Summary

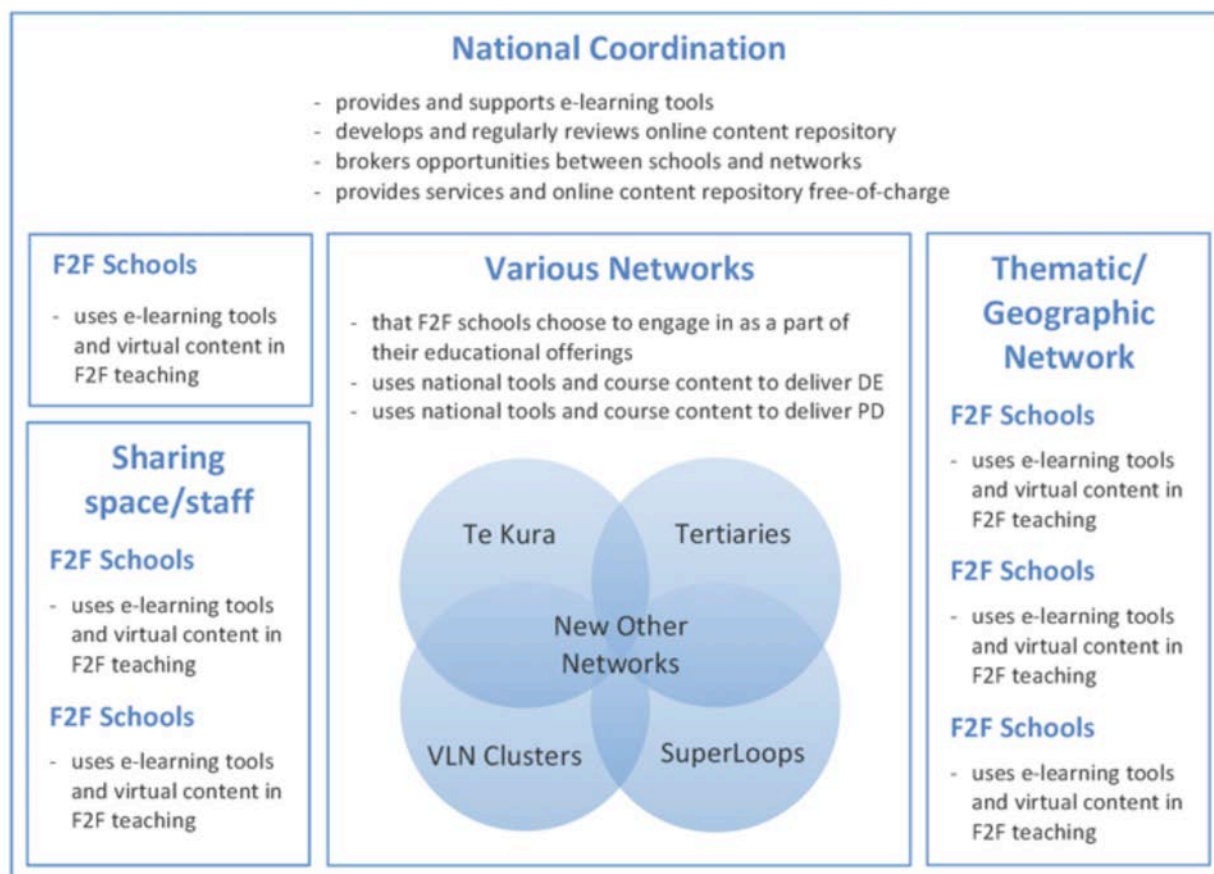
Of the three options presented, the second provided the most robust and sustainable approach, with funding being generated from the transaction of services, as well as membership contributions for which value is realised through the benefits of membership. This option was also, however, the most problematic to achieve, as it required a concerted effort from the members and the establishment of a business unit separate from the clusters themselves. As none of the existing VLN-C members were experienced in these sorts of things, and because the existing model was so firmly established in a Ministry of Education-funded paradigm, no action has been taken to adopt this or any of the three recommendations to date.

## Consolidating a way forward for New Zealand schools

While the DEANZ report to the Ministry of Education (i.e., Barbour [2011]) and the business case for the VLN-C (i.e., Wenmoth [2011]) were tasked with separate goals, there is a great deal of overlap in the model proposed by Barbour and the first two options proposed by Wenmoth. However, one of the main limitations of both of these reports was the strict focus on the VLN e-learning clusters and the VLN-C. This VLN focus meant that the broader range of providers of primary and secondary a distance education were not considered in either of the proposed models. For example, the role and funding provided to The Correspondence School and the SuperLoops – along with the operation of the three health schools and the growing number of tertiary providers – are all a part of the context of virtual learning in New Zealand's schools sector and should be considered within the context of a new organisational model.

For example, The Correspondence School presently has a large repository of content developed for a traditional correspondence model of distance delivery. In addition, the past decade has seen an increase in the development of online or web-based courses by The Correspondence School. Although, it should be noted that many of the students who enrol in courses from The Correspondence School are located in geographic regions where Internet access is still a challenge, so there continues to be a significant audience for their traditional correspondence courses. Similarly, many of the members of the SuperLoop have developed their own online course content – sometimes for complete courses and in other instances more modularised or learning object-oriented. This is on top of the courses that the various VLN e-learning clusters have developed over the years (in some cases in duplicate or triplicate when multiple clusters have offered the same courses).

Given this multitude of differing players in the virtual learning environment in New Zealand, there is one potential organisational structure that could be accommodated within the existing and impending realities that allows schools to become more networked in their own orientation towards student learning.



**Figure 3. Potential organisational structure for the delivery of virtual learning in New Zealand**

Under this organisational structure, ideally one national body would have three main responsibilities:

1. provide and support asynchronous and synchronous tools for virtual learning (e.g., video-conferencing, virtual classrooms, learning management systems, student information systems, e-portfolio programmes, etc.),
2. develop and maintain a repository of online course content that is available to users free-of-charge, and
3. provide brokerage services for users that wish to provide excess capacity to or collaborate with others.

This structure would allow existing distance education providers to focus specifically upon the provision of distance education and professional development (potentially even to specialise with certain geographic, pedagogical, ethnic, gender, etc. foci). It would also allow individual schools and teachers to use virtual learning tools and virtual learning content with their face-to-face students in a blended format or a “flipped classroom” model. Finally, it would allow individual or multiple schools to consider creative scheduling and delivery options (e.g., a course in a school where the teacher is scheduled in one slot and the students are scheduled throughout the day or where two teachers at two different schools collaborate to combine their students into a single class – see the “Opening Classrooms” section of Barbour [2011]).

This structure would change the nature of individual schools – at least in terms of potential membership and governance. At present, most schools that belong to a VLN e-learning cluster or one of the SuperLoop members only belong to a single body (i.e., one cluster or one loop). Further, presently all schools in New Zealand are individually self-governed under “Tomorrow’s Schools.” While the existence of the VLN e-learning clusters and the SuperLoops has resulted in cooperation among individual schools, that cooperation has often been simply to leverage external funding or out of necessity to maintain sufficient enrolment levels needed to continue to exist. This organisational

structure would encourage schools to belong to or associate with a variety of geographic and thematic networks. For example, Wellington College might want to belong to a thematically focused network on boys' education, a geographic network of Wellington-area schools, and a network of urban schools. Another example, Marian College, a Catholic Girl's School in Christchurch, might want to belong to thematically-focused networks that have a focus on Catholic education, urban education, and girls' education; as well as the local Greater Christchurch Schools Network for scholarship exam mentoring and teacher professional development, but also CantaNet for the provision of some online course to supplement their in-school offerings. Turakina Māori Girls' College is a third example, currently belongs to *Tātahi* (i.e., a network of Māori boarding schools), but might also want to belong to a network focused on Māori education and girls education; as well as receive courses from the FarNet VLN e-learning cluster (which has a history of providing distance education to primarily Māori students).

This structure could also encourage schools to cooperate across schools, where two teachers located at two different schools – possibly in geographic proximity to each other, but not necessarily – could team-teach the same course to students located at both schools. This kind of cooperation calls into question the value, and even the ability of schools to continue to be individually self-governed.

Finally, this structure has the potential to re-envision the physical nature of a school. If some or much of the learning is completed in a virtual environment, is there a need for ALL students to physically be in a school for ALL of the school day. For some students, under this structure, there may not be a need for them to be physically present in the school building all of the time; which opens up interesting opportunities to create open learning spaces that could be used by more than a single school. This vision of multiple schools coordinating their use of one or more shared spaces – possibly even using shared or collaborative staffing models – calls for a new vision of what is a school and how this “school” should be governed or managed.

At present, the Ministry of Education currently provides and supports a variety of e-learning tools (e.g., video-conferencing bridge, a learning management system [*Moodle*], an e-portfolio system [*Mahara*], and streaming video services [eTV], an online community and course brokerage website [VLN], and the suite of tools on the MoE “software for learning” website<sup>3</sup>), Similarly, the Ministry of Education also provides brokerage services for the existing VLN e-learning clusters to allow clusters with excess capacity to enrol students from other clusters. The only aspect of the national coordination portion of this organisational structure is the online course repository.

When it was first announced, the N4L was going to be an organisation designed “to engage students in their learning by making digital technology and authentic content accessible for all schools” (Network for Learning, 2012, ¶ 35). However, while some of the staffing has been put into place, there is still little indication of what the N4L will actually become (and some reports indicated that the earliest this may be known is April 2014). One function, consistent with the original mission/vision of the N4L, would be to develop and maintain an online course repository. This repository would be organised by course, but created as a series of individual lesson and/or learning objects that were tagged with the appropriate standards and/or competencies for the grade level and subject area. This would allow individual teachers, schools, and distance education programmes to easily utilise a full course of online content or a single unit or lesson in their own systems. In order to begin the creation of this repository, the N4L could start by appropriating the existing content currently owned by The Correspondence School, the VLN e-learning clusters, and the SuperLoop Group. This appropriation would occur on the condition that these materials are made freely available to any educational organisation in New Zealand (obviously, including those organisations that contributed this original material).

The creation and maintenance of this online course repository, along with the e-learning tools and brokerage services provided by the Ministry of Education or some other national body, would give schools the freedom to explore learning opportunities for their students that are more consistent with the vision of networked schools. It is interesting to note that Wenmoth (1996) wrote that:

<sup>3</sup> See <http://softwareforlearning.tki.org.nz/>

*In the ideal open learning environment, a student's vision of how they learn might be reflected in the extent to which they are able to:*

- › *enrol at institutions of their choice,*
- › *enrol at various times of the year,*
- › *study courses at different levels,*
- › *study courses of various lengths*
- › *start at an appropriate point,*
- › *learn in different modes with alternative delivery models,*
- › *study at their own place, place, and time, as convenient,*
- › *complete courses at their own pace,*
- › *sit final exams or have summation assessment at various times of the year,*
- › *resit final tests, etc., and*
- › *learn throughout their lives. (pp. 1-2)*

More than a decade and a half later, even with the development of dozens of e-learning programmes, this early vision of networked schools has still not been fully realised. This organisational structure has the potential to allow schools, in cooperation with each other, to explore that kind of open learning environment.

## References

- Barbour, M. K. (2011). *Primary and secondary e-learning: Examining the process of achieving maturity*. Christchurch, New Zealand: Distance Education Association of New Zealand. Retrieved from [http://www.vln.school.nz/mod/file/download.php?file\\_guid=114023](http://www.vln.school.nz/mod/file/download.php?file_guid=114023)
- Bennett, C., & Barbour, M. K. (2012). The FarNet journey: Perceptions of Māori students engaged in secondary online learning. *Journal of Open, Flexible & Distance Learning*, 16(1). Retrieved from <http://journals.akoatearoa.ac.nz/index.php/JOFDL/article/view/105>
- Bolstad, R., & Lin, M. (2009). *Students' experiences of learning in virtual classrooms*. Wellington, New Zealand: Ministry of Education. Retrieved from <http://www.nzcer.org.nz/research/publications/students-experiences-learning-virtual-classrooms>
- Bolton, C. (2008, August). *The Virtual Learning Network in New Zealand*. A paper presented to the biennial conference of the Distance Education Association of New Zealand (DEANZ), Wellington, New Zealand.
- Buckrell, P., et al. (1992). *The use of telecommunications technologies for the enhancement of educational services: Report for the Department of the Prime Minister and Cabinet*. Auckland, New Zealand: Consultel Associates.
- Compton, L.K., Davis, N.E., & Mackey, J. (2009). Virtual field experience in virtual schooling. *Journal of Technology and Teacher Education*, 17(4), 459-477.
- Cowie, B., Jones, A., & Harlow, A. (2008). *TELA: Laptops for teachers evaluation final report years 7 & 8*. Wellington, New Zealand: Ministry of Education.
- Dewstow, R., & Wright, N. (2005). Secondary school students, online learning, and external support in New Zealand. *Computers in the Schools*, 22(1), 111-122.
- e-Learning Ontario. (2012). *Ontario's e-learning strategy - Regional e-learning contacts*. Toronto, ON: Queen's Printer for Ontario. Retrieved from <http://www.edu.gov.on.ca/elearning/relc.html>
- Lai, K.-W., & Pratt, K. (2009). Technological constraints and implementation barriers of using videoconferencing for virtual teaching in New Zealand secondary schools. *Journal of Technology and Teacher Education*, 17(4), 505-522.
- Ministry of Education. (2011). *Learning communities online handbook*. Wellington, New Zealand: Author. Retrieved from <http://www.vln.school.nz/pg/groups/2644/lco-handbook/>
- Ministry of Education. (2012). *Ultra-fast broadband in schools*. Wellington, New Zealand: Author. Retrieved from <http://www.minedu.govt.nz/theMinistry/EducationInitiatives/UFBInSchools.aspx>
- New Zealand Parliament. (2012). *Inquiry into 21st century learning environments and digital literacy*. Wellington, New Zealand: Author. Retrieved from [http://www.parliament.nz/en-NZ/PB/SC/MakeSub/f/9/7/50SCES\\_SCF\\_00DBSCH\\_INQ\\_11275\\_1-Inquiry-into-21st-century-learning.htm](http://www.parliament.nz/en-NZ/PB/SC/MakeSub/f/9/7/50SCES_SCF_00DBSCH_INQ_11275_1-Inquiry-into-21st-century-learning.htm)
- Parkes, S., Zaka, P., & Davis, N. (2011). The first blended or hybrid online course in a New Zealand secondary school: A case study. *Computers in New Zealand Schools: Learning, Teaching, Technology*, 23(1). Retrieved from <http://education2x.otago.ac.nz/cinzs/mod/resource/view.php?id=149>
- Parr, J. M., & Ward, L. (2005). Creating online professional learning communities: A case of cart before horses. In K-W. Lai (Ed.), *e-Learning communities: Teaching and learning with the web* (pp. 125-134). Otago, New Zealand: University of Otago Press.
- Powell, A., & Barbour, M. K. (2011). An Examination of Government Policies for E-Learning in New Zealand's Secondary Schools. *JOFDL*, 15(10). Retrieved June 28, 2011 from <http://journals.akoatearoa.ac.nz/index.php/JOFDL/article/view/17>
- Pullar, K., & Brennan C. (2008). Personalising learning for secondary students working in a blended (distance/face to face/vocational) learning environment. *Computers in New Zealand Schools*, 20(2), 6 – 16.
- Rivers, J., & Rivers, L. (2004). *A summary of the key findings of the evaluations of the digital opportunities pilot projects (2001–2003): A summary report to the Ministry of Education*. Wellington, New Zealand: Ministry of Education. Retrieved from <http://www.educationcounts.govt.nz/publications/ict/5767/23745>
- Roberts, R. (2009). Video conferencing in distance learning: A New Zealand schools' perspective. *Journal of Distance Learning*, 13(1), 91-107.
- Roberts, R. (2010). Increasing access for learners – The Virtual Learning Network. In V. Ham & D. Wenmoth (Eds.), *e-Learnings:*

- Implementing a national strategy for ICT in education, 1998-2010* (pp. 144-152). Christchurch, New Zealand: CORE Education Ltd.
- Rumble, G. (1989). The role of distance education in national and international development: An overview. *Distance Education*, 10(1), 83-107.
- Sahin, S., & Ham, V. (2010). *Outcomes for teachers and students in the ICT PD school clusters programme 2006-2008: A national overview*. Wellington, New Zealand: Ministry of Education. Retrieved from [http://www.educationcounts.govt.nz/\\_data/assets/pdf\\_file/0004/75757/942\\_TchrReview-05052010.pdf](http://www.educationcounts.govt.nz/_data/assets/pdf_file/0004/75757/942_TchrReview-05052010.pdf)
- Selby, L., Ryba, K., & Falloon, G. (2005). Improving educational opportunities through ICT partnerships. In K-W. Lai (Ed.), *e-Learning communities: Teaching and learning with the web* (pp. 93-109). Otago, New Zealand: University of Otago Press.
- Stevens, K. [Kerry]. (2011). *The distribution of instructional leadership in elearning clusters: An ecological perspective*. Unpublished Master's Thesis. Christchurch: University of Canterbury.
- Stevens, K. [Ken]., (1994). Some applications of distance education technologies and pedagogies in rural schools in New Zealand. *Distance Education*, 15(4), 318 – 326.
- Stevens, K. [Ken]., (1995). Some policy considerations in the changing relationship between area schools and New Zealand rural communities. *Social Policy Journal of New Zealand – Te Puna Whakaaro*, 5, 80 – 87.
- Stevens, K. [Ken]., & Moffatt, C. (2003). From distance education to e-learning: the organization of open classes at local, regional and national levels. In J. Bradley (Ed.), *The open classroom: Distance learning in and out of schools* (127-134). London, England: Kogan Page Limited.
- Te Kura. (n.d.). *Our history*. Wellington, New Zealand: Author. Retrieved from <http://www.correspondence.school.nz/about-us/history>
- Treadwell, M. (2010). Personalising learning: The quiet revolution of learning management systems. In V. Ham & D. Wenmoth (Eds.), *e-Learnings: Implementing a national strategy for ICT in education, 1998-2010* (pp. 133-43). Christchurch, New Zealand: CORE Education Ltd.
- Waiti, P. (2005). *Evaluation of Kaupapa Ara Whakawhiti Mātauranga (KAWM)*. Wellington, New Zealand: Ministry of Education. Retrieved from <http://www.educationcounts.govt.nz/publications/ict/5087>
- Wenmoth, D. (1996). Learning in the distributed classroom. *SET Research Information for Teachers*, 2(4). 1–4.
- Wenmoth, D. (2005). The New Zealand Correspondence School and the video conferencing cluster schools network. In *Open Schooling Models*. Goa, India: Commonwealth of Learning for the International Conference on Open Schooling.
- Wenmoth, D. (2010). The future – Trends, challenges and opportunities. In V. Ham & D. Wenmoth (eds.). *e-Learnings: Implementing a national strategy project for ICT in education, 1998-2010* (pp. 196-203). Christchurch, New Zealand: CORE Education.
- Wenmoth, D. (2011). *Business case: Virtual Learning Network-Community (VLN-C)*. Christchurch, New Zealand: CORE Education.
- Wright, N. (2010). *e-Learning and implications for New Zealand schools: A literature review*. Wellington, New Zealand: Ministry of Education.
- Zimpfer, L. (2010). Building a national ICT infrastructure for learning. In V. Ham & D. Wenmoth (Eds.), *e-Learnings: Implementing a national strategy for ICT in education, 1998-2010* (pp. 32-44). Christchurch, New Zealand: CORE Education Ltd.



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