Supporting primary student Independence in virtual learning: Investigating the role of school-based support staff

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Abstract

This paper reports on the emerging findings of a small qualitative study investigating the role of school based support staff (hereafter referred to as SBSS) in supporting students to become independent virtual learners in the Virtual Learning Network Primary School (VLNP). The VLNP is a collaboration of schools throughout New Zealand providing virtual learning opportunities for their students in subjects that are not available in their own schools. The SBSS are staff members in the student's home school who support and mentor the student during their time in the VLNP. Students that learn through the VLNP have varying levels of academic, technical and independent skills. In some schools SBSS assist students, however the expectations and degree of support varies from school to school. Two schools within the VLNP were used in this study. An interpretive qualitative methodology was adopted using individual semi-structured online interviews with the teachers, eteachers, principals and students at each of the case study sites. Grounded Theory was used to analyse the data. Eight key themes emerged to highlight the multiple roles that the SBSS importantly play in the VLNP. These include developing critical thinking, providing a wrap around approach, removing barriers to learning, providing opportunities, tuakana/teina: learning from each other, allowing students to take responsibility for their own learning, monitoring teaching and learning, and having administrative/managerial processes in place. The key findings in this study are of distributed support by all stakeholders and the importance of the role of the SBSS in coordinating this support.

Introduction

This paper reports on the emerging findings of a small qualitative study investigating the role of school based support staff (SBSS) in supporting students to become independent virtual learners in the Virtual Learning Network Primary School (VLNP). Virtual learning in Aotearoa New Zealand schools has been steadily growing over the last 15 years and is now established as a recognised form of education in secondary schools (Barbour, 2011); and in the last 7 years, for primary schools.

The Virtual Learning Network Primary School (VLNP) is a collaboration of schools that formally began in 2009 through the need of small and rural primary schools to deliver languages as outlined in *The New Zealand Curriculum* (Ministry of Education, 2007). VLNP schools looked for ways to transform their teaching and learning environment to provide subjects for their students they aren't able to provide in their own schools. The VLNP provides the opportunities for students by organising and enabling online collaborations between schools. (See Fig 1 for VLNP structure.)
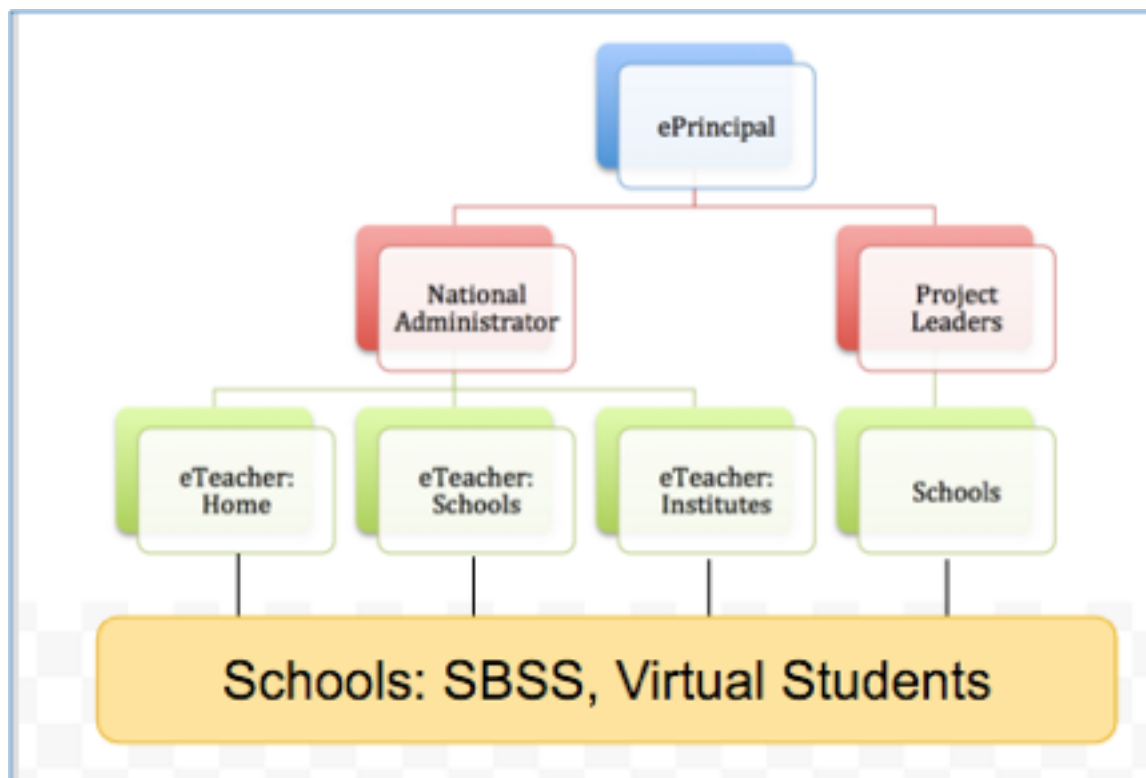
 Figure 1. Structure of the Virtual Learning Network Primary School

One of the Protocols of Participation in the VLNP is 'It is the responsibility of the home school to ensure that students are interacting appropriately and supported to do this where necessary.' (VLNP, 2009). There have been several different teacher roles identified in the virtual learning environment (Barbour, 2011; Davis & Niederhauser, 2007). Davis and Niederhauser (2007), for example, suggest that there are three core roles in the virtual learning system: the eteacher, the designer and the VS (Virtual School) Facilitator (SBSS). While the VLNP use the term SBSS, Watson (2007) uses the term 'mentor' while Davis and Niederhauser (2007), suggest that it has also been referred to as 'site coordinator' or 'coach'.

The SBSS plays a key role in supporting students to become independent virtual learners and can be undertaken by a classroom teacher, admin staff, teacher aide, principal or a person hired specifically for the job (Davis & Niederhauser, 2007). They are at school on-site with the students and act as the liaison between the students' school and the VLNP National Administrator and the students' eteacher (Davis & Niederhauser, 2007). The students' eteacher is usually off-site, working virtually with the students both synchronously, through Adobe web conferencing software (Adobe Connect), and asynchronously, through the VLNP online student learning environment WeLearn, which uses the Elgg social networking engine.

The SBSS, as a role and resource, is a most important, underestimated and underprepared role for supporting virtual students to be independent learners (Davis & Niederhauser, 2007). Barbour and Reeves (2009) called for further research on the 'factors that affect student success in virtual school environments' (p. 412), particularly with regards to the role and ways that SBSS can support virtual learners to achieve learner independence and success.This project seeks in a small way, to examine that.

The problem being addressed

Students in the VLNP typically have only one scheduled period a week of online synchronous instruction. The students then work asynchronously on their online projects or homework in their own schools or at home. In some schools an SBSS may assist students with these tasks, however the expectations and degree of support varies from school to school. In many of the VLNP online staff meetings it has come up time and again about the lack of support that some students are receiving in their home school, the poor homework completion rates, students missing classes because of forgotten passwords or forgetting the url for the online class. Watson (2007) and Davis & Niederhauser (2007) make similar suggestions. Communications between the students' school and the eteacher are also ad hoc, with some eteachers having little or no contact with the students' schools. In small rural schools the Principal may also be the teacher, an eteacher and the SBSS, whereas in a larger school these roles may be separate.

It is widely accepted that there has been a dearth of rigorous research into virtual schooling. At present the majority of the research into virtual learning has focused on adult learners, the eteacher and administrators with very little focus on the student or the SBSS in primary schools (Barbour & Reeves, 2009). There is a need for further research into the roles of the SBSS, and the development of new school structures where learner independence is supported by pedagogy and resources (Bolstad & Lin, 2009).

This research aims to obtain a better understanding on the role of effective SBSS and how it might be implemented within schools in the VLNP in order to better support the learning of students in Aotearoa New Zealand primary schools. Two schools identified as portraying exemplary SBSS practice in supporting online learners were case studied. The findings of this research will:

- assist schools within the VLNP to identify the role of the SBSS in order to better support their virtual students,

- complement the existing policies and protocols of the VLNP regarding the SBSS's role and scope of responsibility,

- inform schools who are contemplating having students learn virtually to develop their SBSS policy, procedures and resources,

- provide better support for students and complement the support available from their school, eteachers, parents and whanau, and peers.

Within this context perspectives were gathered in order to gain a deeper, richer understanding of how VLNP schools support their students.

Study design/Approach

The overarching research question asked was: *What role does the SBSS play in the VLNP in supporting virtual students to be independent virtual learners?*

An interpretive qualitative methodology (Denzin & Lincoln, 2011) was adopted to frame this study. Two primary schools, ranging from U1 to U5 size (New Zealand Education Institute, 2013), that portrayed exemplary characteristics and practices of SBSS which have a VLNP component agreed to participate in the study, to obtain perspectives of SBSS and eteachers. Schools were selected that have:

- been with the VLNP for a minimum of three years,

- provided an eteacher for the VLNP, and,

- illustrated exemplary characteristics of the SBSS as suggested by Davis and Niederhauser (2007) such as:
    - providing support for students experiencing problems of varying types,
    - monitoring and mentoring of students,
    - being a liaison between the student's school and the eteacher,
    - providing assistance in course selection for students,
    - providing face-to-face communication with students.

I have an established relationship with the schools through the VLNP as an eteacher and through the VLNP Governance Group. Being part of the VLNP Governance Group, I have access to the database on schools and in consultation with the ePrincipal identified two schools that fit the criteria.

Individual semi-structured interviews with the teachers, eteachers, principals and students at each of the case study sites were used to gather the participants' understanding and personal experiences of the roles of the SBSS. The interviews were conducted online using the Voice Over Protocol platform, Skype, and recorded with the software Camtasia, as well as by phone where necessary. All interviews were transcribed and adult participants were given the opportunity to review their transcript.

Grounded Theory, an inductive analytical approach (Bryant & Charmaz, 2007) was adopted to analyse the data. It involved a dynamic activity between data collection and analysis. As the data was collected, codes were generated and developed into categories. Copious memoing of ideas, which Miles, Huber & Saldaña. (2013) describes as 'little conceptual epiphanies' (p.99) were recorded as they formed. These memos eventually merged and emerged into the Key Idea. Ethical approval for the research was obtained and all participants participated voluntarily.

Findings

Many initial codes were generated from the raw data. From these, eight categories emerged and are depicted in Table 1. This table depicts the categories, describes them, and includes an illustrative quote.

Category	Description	Quote
Developing critical thinking	Assisting students to reflect on learning	"teaching them how to, the kids, how to troubleshoot it, without needing other people"
Providing wrap around approach	Involving teachers, parents and providing support and encouragement to all stakeholders	"getting other people enthusiastic"
Removing barriers to learning	Providing sufficient infrastructure, adequate resources, and removing all structural stresses (Putz, 2013)	"'I couldn't get on because my password doesn't work', So sometimes it's around the technical stuff, … I've put a link on our school website which they have access to."
Providing opportunities	Providing choice, opportunities and alternative ways to access learning	"Well we have like five different choices of the languages and then we've got like three other choices like maths, astronomy, science, and computer programming of the four choices and then for the rural kids there is one class for us all to do like all these different subjects and stuff and that."
Tuakana/teina: Learning from each other	Providing environment for peer to peer learning	"I've often said to her well why don't you message one of the others from the other school and see what they think, it's a digital online tool. But often for her she needs that face to face contact and I said well Skype her."
Allowing students to take responsibility for their own learning	Providing opportunities for students to develop their independent capabilities, life skills and Key Competencies	"It's just all that type of stuff that they've got to go through but you've got to give them the language so that they can do that."
	Liaising between eteacher and classroom teachers, ensuring online attendance, and keeping track of students learning	"Making sure they are up to date with the work and the work they are missing out of in class."
Having processes in place	Ensuring that the policies, procedures and protocols are in place and being followed	"We put it into our strategic plan last year so it's part of our strategic plan..."

TABLE 1. Eight exemplary roles of the School-Based Support Staff (SBSS)

Discussion/conclusion

This study sought to better understand how schools within the VLNP support their virtual learners within their own schools. It was particularly interested in the role that the SBSS played in supporting learner success and independence in primary aged students. Eight categories in relation to exemplary roles of the SBSS were identified which can be explained through the notion of a distributed support model approach to online learner support. The distributed support model enables the SBSS to provide the students with opportunities to develop independent learning skills by crafting an environment of distributed responsibility for, by, and with the learner. The Distributed Support Model shows the SBSS working in collaboration with the students, the school,

the parents and whanau, and the eteacher in a wrap around service role, to support the students in their learning and in taking responsibility for their own learning.

Students come to the VLNP requiring varying levels of support as online learners: dependence to interdependence to independent. The findings indicate the SBSS play an important role at each level in supporting students towards developing their independence. For example, when students first start out in the VLNP the SBSS needs to provide scaffolded support and work within the student's zone of proximal development (Vygotsky, 1978). This builds into the SBSS using a guiding role as the students develop interdependence where they interact with peers to problem solve and develop skills. Finally the SBSS role changes to one of monitoring as the students become independent online learners who can also assume support roles over time.

The SBSS is the most important, underestimated and underprepared role (Davis & Niederhauser, 2007) and this research has gone some way to identify the 'factors that affect student success in virtual school environments' (Barbour & Reeves, 2009. p. 412). The SBSS is not the only support in the students online learning, the eteacher, principal, parents,whanau and school technicians also play important roles. They are however the most significant support person as they share the student's physical location. This research illustrates that a distributed support model has the potential to frame the role of the SBSS in Virtual Learning Network Primary Schools in order that they can provide effective support for students to become independent virtual learners. The VLNP's scoping of a SBSS's role of responsibilities can be informed by the notion of the distributed support model to help complement their existing policy and protocols that assist schools in developing the SBSS roles, policies and procedures within their own schools.

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