How are schools developing Learning Management Systems (LMS) to enhance and complement teaching and learning?

Principals Sabbatical Report

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August 2011

Acknowledgements

I would like to acknowledge first and foremost the Thorrington School Board of Trustees for supporting my application for sabbatical leave and assisting financially towards the kilometers I travelled on my visits to other schools.

I also acknowledge my very capable Deputy Principal and Leadership Team for the great job they did in keeping "ship on course" in my absence.

I acknowledge the Ministry of Education for making sabbatical leave available to Principals. The opportunity to be able to take time out and look in depth at an aspect of our practice, to indulge in uninterrupted reflection and to have a period of refreshment is invaluable.

My last acknowledgement is to the schools I visited. The Principals, or in many cases their Leadership Teams, gave me a large amount of their time in a generous and open manner, taking the opportunity to share what their schools were doing with passion and pride.

Purpose

The purpose of my time spent on sabbatical was to investigate how best to utilize a Learning Management System (LMS) to enhance and complement teaching and learning at Thorrington School while ensuring it

- is relevant to and engaging for our students
- is consistent with our teaching and learning pedagogy "Teaching and Learning the Thorrington Way"
- complements our School Based Curriculum

Background

Over the last few years Thorrington School has made considerable progress in developing eLearning as an integral part of it's teaching and learning pedagogy. Considerable investment in infrastructure, connection to fibre (Ultrafast Broadband) and an embedded eLearning pedagogy positioned us extremely well for our next step of introducing a Learning Management System.

We had begun experimenting with Ultranet, our chosen Learning Management System, however we had struggled to harness the full potential of this tool, hence progress made, in my eyes, had been limited.

To have time to explore the possibilities of Ultranet through discussions with those who are further down the track than us and have the time to "play" myself would enable me to firm up our school's direction with this tool.

At the time of preparing my sabbatical proposal I was interested in exploring how other schools had developed Ultranet in terms of the actual "structure" of the software.
- What modules had they enabled
- What permissions / access to areas for students, parents and teachers
- What interface was their with school's web page.
- Had they enabled any interoperability with their SMS (Student Management System).

However twelve months on in our own development and striking a few challenges on the way, I became more interested in the thinking behind the use of the tool.

Hence fundamental questions around …

What Vision do you have for your LMS? How did you arrive at this? Why did you introduce it? became important also.

I was beginning to wonder whether some of our challenges were the result of not having a clear, well thought out vision about "why are we doing this" and "what is the purpose of an LMS in our school" Or even more broadly, "How should we be developing our Virtual Learning Environment (VLE) both in the short and long term?"

Methodology
My plan was to initially spend time reading any research that I could find about LMS's, then visit ten selected schools in Christchurch and Timaru and discuss with them the following questions:-

> *How is your school developing its Learning Management Systems (LMS) to enhance and complement teaching and learning?*
>
> - *What Vision do you have for your LMS? How did you arrive at this? Why did you introduce it?*
> - *How have schools established the "structure" of their LMS? ie: layers, permissions, links to school website.*
> - *What inter-operability have they enabled to their Student Management Systems?*
> - *How have teachers developed their class pages? How are students accessing these, how often and for what purpose?*
> - *What are students contributing and how does this link to classroom?*
> - *What access do parents have? What are they accessing, how often and for what purpose?*
> - *How have issues through the development and use processes been identified and addressed? What were some of these?*

All of these schools apart from one were using Ultranet as their LMS, so a further question of "why Ultranet" would also be part of the discussions.

Also during my visits to schools I was hoping to see their LMS in action and view for myself how they had set it up.

The schools selected were of varying sizes, deciles, stages of development and had varying hardware infrastructure.

Findings
Readings.
I found there to be little research about LMS's (or Virtual Learning Environments as described by some overseas literature) in New Zealand schools particularly at the Primary level that outlined how schools are using these tools to enhance teaching and learning.
There was however some very good material on the Ministry of Education TKI website that would be very useful for schools when considering implementing an LMS.
This material guides schools through some of the thinking required to develop their Online Learning Environment.
The site also contains a very helpful resource that contains information and questions that are designed to assist school's management team in considering the adoption or adaptation of a learning management system (LMS).
In these they suggest a process of discussion that will help making decisions about an

LMS and to make informed choices about the products and services (tools, resources, and software applications) that are available.
They aim to encourage schools to consider the type of LMS they might need and where it might fit within the bigger picture: the development of a managed online learning environment (OLE).

Another informative paper that helped me with my understanding of LMS, VLE, OLE's (Online Learning Environments) and PLE's (Personal Learning Environments) was one written by Derek Wenmoth in 2007 titled Understanding OLE / PLE Relationship.
In this Derek reflects on the interrelationship of these and demystifies what these might look like in our schools.

Schools.
As I expected schools had taken varied approaches to implementing their LMS. The majority had begun implementation with a specific need for an aspect of the software.
ie: Their website needed updating and Ultranet gave them the functionality to link off this.

- *What Vision do you have for your LMS? How did you arrive at this? Why did you introduce it?*
Few, like us, had given little if any real thinking to "why are we doing this" in relation to the development of their OLE and more importantly complementing teaching and learning. Some had gone through a systematic process for selecting their LMS and while seeing some possibilities in the software, had climbed on board

- *How have schools established the "structure" of their LMS? ie: layers, permissions, links to school website.*
All schools using Ultranet had their website as the key portal within their LMS. Most had developed their websites as the main portal for sharing information and celebrating learning within the school and parent community.
All were giving consideration to privacy issues and the resulting impact of what was completely open on the web and what was to have password access. Individual student permissions were being used particularly with senior students while juniors were finding a generic password much more manageable.
Few had developed much parent interaction with the learning and therefore hadn't gone to issuing individual parent passwords. Parents were using generic passwords to view learning celebrations of school and class.

- *What inter-operability have they enabled to their Student Management Systems?*
Unfortunately none of the schools I visited had any inter-operability activated. There are obviously still issues with SMS providers, LMS providers and the Ministry getting this completely operational. Some schools expressed frustrations with their SMS provider's lack of progress in this regard.

- *How have teachers developed their class pages? How are students accessing these, how often and for what purpose?*
Approaches to the development of the software were varied however those who had obviously made the most gains had some common attributes:

- an enthusiastic team approach, led by two or three key personnel who were highly motivated, leading by example and clearly very excited about the possibilities of the tool.
- Links to teaching and learning were evident. The software was very much a part of the classroom programme and not an add on.
- Learning was being celebrated in creative ways through the class areas and lesser degree through open access school website.
- High quality, regular and ongoing professional learning was occurring through a planned well thought through action plan. The majority of these schools were on ICT PD contracts.
- Principals that were "in touch" with what was going on and were clear about 21st Century learning and the obvious links to ICT.
- Good ICT infrastructure had been developed though not to optimum levels yet. Most were part way through getting access to ultrafast broadband.
- Students were actively learning within either the classroom area and or the USpace module
- Enrichment groups for students were well established making contributions to the development and the day to day running of the tool – particularly the sharing learning aspect.

- *What are students contributing and how does this link to classroom?*

Some teachers had developed areas for students to showcase written work, share their learning from inquiries, upload scanned artwork, photos and videos. This was happening most effectively where teachers had developed frameworks, protocols and systems to ensure consistency in presentation and quality of work.

Initially teachers developed their websites to be used as a portal for their students to access homework and also a few web links to associated learning sites. In these cases students were not engaging in the site as much as those who were sharing their learning and collaborating with each other.

Where the highest levels of students engagement were evident teachers were using the class area in interactive ways, setting learning tasks for students to access anytime anywhere. While the majority of activity was obviously during the school day growing numbers of students were continuing their learning at home. Days when schools were closed (snow and earthquake) saw pupils use their LMS to continue with their learning. Some schools had opened their USpace areas to their students and were beginning to develop this safe environment to really enhance collaboration in learning. Teachers again had developed this area in different ways. The focus was the showcasing of work with the resulting feedback from other students a clear motivator to continue contributing.

A few schools had begun to develop the Portfolio module within USpace. This included learning goals, some learning data (manually transferred from their SMS), reports as well as some of the showcased work ie: evidence of progress. These schools had identified their next steps to make this area available for password protected parent access. One school had used this space for sharing at Three Way Learning Conferences. What was great to see here was that students had the ownership of this area and were responsible for its upkeep.

- *What access do parents have? What are they accessing, how often and for what purpose?*

All schools were using their LMS as a communication and information portal. Schools felt (though not actually measured) that parents were accessing their website more frequently for the newsletter, notices and general information about the school.
It was felt that the uptake to view learning had been much slower.

Some schools had provided parents with generic passwords to access class sites however pick up of this had been slow. Parent access to these areas tended to be done when their children were in the site on their own passwords.
One school, due to parents' limited access to the web, was exploring alternative ways to share learning with mums and dads. An idea being explored was the burning to disc material and playing it on an interactive media machine such as an "Xbox" or "Playstation".

- *How have issues through the development and use processes been identified and addressed? What were some of these?*

Like all new initiatives in schools they are prone to distractions and even major derailment. All Principals acknowledged that the right staff leading the initiative was crucial to successful implementation with a group rather than an individual being also important. (This also considered crucial in succession planning).
Some of the key issues identified were:
- the challenge of getting all staff on board. (This was a big issue particularly with large schools)
- the huge variation in up-skilling required
- frustrations with slow upload speeds due to limited bandwidth
- "early adopters" leaving the rest behind creating a large disparity in what is being developed and available to students and their learning

Principals acknowledged that none of these were easy to address and all required long term plans and actions to make progress.
All were very keen to see a user group established so that lessons learnt could be shared.

Implications for Thorrington

Thorrington School is extremely fortunate in that VLE resource at its disposal would be one of the best in Canterbury.
Connection to ultra fast broadband, a new network (SNUP upgrade 2011), connection to the NEN (National Education Network), four to six Macbooks in every room, Interactive whiteboards in 75% of classrooms, ICT Professional learning contract 2007-2009 all position our school extremely well in developing the very best online learning environment for its students, teachers and community.
How then do we get the best out it?
From my reading, visits and reflection our pathway forward could include:-
- Develop a clear vision for our VLE. Staff need to have understanding of the purpose of it and why they should use it. These discussion will hopefully lead staff to the understanding that the VLE is a part of teaching and learning not an add on to it.
- Develop expectation of exactly what our VLE needs look like at various parts of the school. (Junior, Middle and Senior Teams).
- Continue the development of Ultranet. This needs to become the hub of teaching and learning. Developments should include the embedding of notices (daily), bookings and calendaring. For parents and the wider community the development of the News Centre as a means of viewing "what's going on around the school"

coupled with an embedded calendar will initiate a clearer more purposeful use of our website.

- Move the fortnightly newsletter to web distribution only (apart from those who do not have web access at home). This further signals the importance of the website as a communication and information portal.
- Open USpace to students (Year 3-6?) and provide a framework, guidelines and protocols for its use. There is huge potential here for students develop their PLE (Personal Learning Environment) to include learning goals, showcase their learning, house reports and other learning data (this could be shared from our SMS once interoperability is established) that could be used at 3WLC time or in fact anytime they so wish to share it with parents.
- Explore the diversification of other devices that have the capability to access our network and VLE. These could include tablets, iPads, iPods and may be student or school owned.

Implications for other readers

First and foremost the Principal needs to be on board with the initiative. It is very easy in areas like ICT for those that are passionate about to be the drivers. While we as the educational leaders of our schools don't need to understand every technical aspect we do need to know enough about to be able to make informed decisions. Weighing the ongoing cost (including the professional learning required) and the fit with the strategic direction of the school with educational outcomes are all considerations Principals need to make. Sitting back, thinking and reflecting, I believe too often schools get caught up in the next wave of good ideas without working through why are we doing this, for what purpose and what are the educational outcomes – something freely admitted by some the schools I visited.

So my advice to my colleagues:

- Don't be in a hurry to implement an LMS!
- Talk to others who have already gone down this road
- Take some time to work through the TKI material about developing your OLE
- Look at all the options available to you. Resist the "wow" factor of the software.
- Be prepared to make compromises in you choice – there is no perfect solution
- Be aware of the ongoing costs of the software plus the additional cost of professional learning
- Consider your school infrastructure – access to sufficient band width, availability of classroom hardware (4-6 devices per room would be a minimum), staff readiness (and willingness!)
- Have plans in place for when key staff leave the school that the initiative does not falter.

Conclusion

The Virtual Learning Environment is a key component of 21st century learning and one that all schools will need to consider as they move forward. From my time exploring Learning Management Systems I can see the tremendous power of the tool to engage students in learning in their world. Perhaps it is time for us to consider whether our more traditional view of learning in the classroom are in fact different from those in a virtual environment. (or are these the Key Competencies in action!)

The tremendously powerful, rich learning that I saw happening in classrooms where an LMS was a <u>part</u> of teaching and learning (and not an <u>add on</u> to teaching and learning) coupled with the ability to also use the tool as the main portal for the parents and the wider community to share and celebrate learning anytime anywhere, have become drivers for me to really progress our developments.

To have the time to see what other schools were doing with this tool and discuss with them why that had taken the direction they had was hugely beneficial. It has helped me clarify our purpose and answer "why are we doing this?". The stumbling block, leading to the derailment of so many initiatives in schools of not having a clear vision, has again been well hammered home.

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