Selecting a Learning Management System

by Heather Pollex, RN BSN MSc(T) EdD
Nursing Education Coordinator, University Health Network

Catherine Johnson RN, BHS
Project Manager, Nursing Informatics, University Health Network

Anya Wood, MDE
ELearning Education Manager, University Health Network

Part Two of a Four-part series on eLearning

Abstract

Transitioning from a classroom-based environment to an online learning environment is challenging in the best of circumstances. Like most initiatives, knowledge and preparation are the keys to success. But where does an organization start when pioneering this new approach to learning? In 2005, University Health Network (UHN) embraced this challenge by purchasing a Learning Management System (LMS) with the goal of integrating education into the daily lives of its' nursing staff. This article describes the process used to analyze needs and select a LMS. Readers will be provided with information about choosing and evaluating a LMS, lessons learned, and tips for organizations seeking to purchase a LMS in the future. This article is the second of a four-part series about elearning.

Introduction

In 2004, an assessment of staff education led to the decision to implement eLearning as a means of addressing the ongoing educational needs of our staff. Before we could get started, however, we were faced with the daunting task of selecting a Learning Management System (LMS) to support this eLearning initiative. A LMS is web-based software that launches educational content, manages course registration, tracks course completion status, maintains transcripts and produces reports. There are a multitude of products available in today's market. Selecting the 'right' system was challenging and time consuming. This article describes the process that we used to analyze our needs and select a LMS.

eLearning Strategy, Needs Analysis and Requirements List

The LMS selection process was much more complex than we had initially anticipated and, in fact, required several preliminary activities. Critical to the LMS selection process was the identification of strengths, weaknesses, opportunities and threats (SWOT analysis) related to eLearning at UHN. The SWOT analysis was completed by an inter-professional group comprised of stakeholders from a wide range of departments throughout the organization. The results of the SWOT analysis highlighted our strengths and opportunities (e.g., senior management buy-in and available funding) as well as our weaknesses and threats that needed to be addressed as we moved forward (e.g., the urgency of integrating with our legacy HR system and little in-house technical expertise). Based on our SWOT analysis, we were able to develop an eLearning strategic plan (which was described in the first article in this series) in which the key features of a learning management system appropriate for UHN were captured.

These requirements included the following:

- A robust eLearning platform with a proven track record and excellent references;
- A financially stable, established vendor (preferably with experience in the health care sector);
- A hosted environment;
- The ability to track staff participation in both online and face-to-face educational initiatives;
- The ability for staff to self-register for face-to-face activities;
- The ability for staff to easily launch web-based content.

Selection Process

Product Research

With our SWOT analysis and eLearning strategy completed and our key LMS requirements clearly defined, our next step was to engage in product research. We set out to accomplish this through a literature review and telephone or email contact with other healthcare organizations that used eLearning. The goals of this research were as follows:

- Compile a list of LMS vendors
- Identify standard features
- Identify unique features

- Identify how different organizations were using their LMS and their level of satisfaction with the product

- Match features against our needs

- Find a turnkey solution

Literature Review

Key sources for our literature review included Medline, CINHL and other healthcare related databases. We also relied on third-party product reviews and Google searches to identify a list of relevant articles and white papers. One of our first challenges was to identify whether the author was in any way affiliated with the product. It was not uncommon to review an article and discover that a specific product vendor wrote the article. Our best sources of information were the articles written by independent experts in the field. Although we did not purchase third party materials, several companies do produce an annual review of learning management systems. In retrospect, purchasing and reviewing one or more of these reports may have greatly reduced our frustration and provided a quick and easy way of obtaining neutral information.

During the course of our literature review and web-search, we identified twenty-four (24) potential vendors and compiled basic information about them, including the vendor name, the product name, contact information, web site address, a short description of the primary product of the company, and other notes.

Contact with other Healthcare Organizations

At first glance, this next step seemed straightforward. However, examples of the use of eLearning and, especially the use of a LMS in a Canadian healthcare setting, were hard to find. In fact, none of the organizations we contacted (in 2003) had implemented a Learning Management System and we were unable to gather the desired information. Nevertheless, on a positive note, we were amazed at the level of interest expressed by other hospitals. This revelation, along with strong and proactive support from our Chief Nurse Executive (CNE), quickly led us to expand the reach of our project to include other local hospitals.

Collaborative Partnerships

Many hospitals, although extremely interested in eLearning, faced financial challenges that made it impossible to move forward with the purchase of a LMS on their own. It made sense, therefore, to suggest forming a collaborative group. We invited nine Toronto Academic Health Sciences Network (TAHSN) hospitals to consider partnering with us to purchase and share a LMS. Our hope was that a

partnership would help reduce costs and create efficiencies through standardization of certain technical requirements common to all partner hospitals.

Request for Information (RFI)

At the time we were hosting discussions with potential partner hospitals, we were also narrowing down our list of vendors. To help us gather more information, we decided to issue a Request for Information (RFI). Our RFI consisted of a brief overview of our organization's needs and our tentative plans to purchase a LMS. The RFI was sent to twelve vendors asking them to identify how their product could address our key needs.

Product Demonstration

Our next step was to provide each of the twelve vendors with an opportunity to promote their company and to provide a high-level demonstration of their product. Each vendor was allocated one hour. Some vendors came to our site; others delivered a live but remote web-based demo; some vendors sent individual representatives; and others sent a whole team. Representatives from the participating hospitals were encouraged to ask questions and to evaluate each vendor using evaluation criteria we had developed for that purpose.

We were able to eliminate some of the vendors almost immediately given that their product was not robust enough, did not meet all of the product criteria (tracking, reporting and delivery), was still in development (not an established product), or was not available as a hosted system.

Request for Proposal (RFP)

Developing the RFP

Based on the product demonstration, we narrowed our number of vendors to five. The vendor demonstrations also provided enough information to our partner hospitals to allow them to make a decision as to whether it was appropriate for their organization to participate in the LMS selection process at this time. Five hospitals were interested in purchasing an LMS as a collaborative. The hospitals that chose not to participate at this time cited lack of organizational readiness as the main factor.

University Health Network developed a Request for Proposal (RFP) with input from the other four

hospitals. A RFP is an invitation to vendors to submit a bid for a specific product and/or service. The RFP outlined the specific criteria required by our collaborative as well as our timelines and dates. Key criteria demanded that our system:

- be a hosted solution with 24/7 technical support and detailed documentation of technical specifications

- be modular

- support user-defined fields/naming conventions and rating system

- maintain employee data and allow for employees to be identified as different user groups

- ensure secure log in

- include "forgot password" feature

- have a user interface that is flexible, compatible with multiple browsers, is visually pleasing, and has navigation that is intuitive to the users

- support AICC & SCORM compliant courses

- support a variety of multimedia formats

- confirm registration via Outlook email and integrate with Outlook calendar

- support and manage a wait list

- support assignment of training plans (one time or recurring)

- support an on-line course catalogue which lists courses, designates prerequisites and other requirements, and allows courses to be launched by clicking on a link

- maintain on-line history of classes

- have built-in tools to create custom tests, surveys and opinion polls

- have a web-based reporting interface to generate standard and custom reports

 The RFP was submitted to the five short-listed vendors who were then given two weeks to ask questions by email. The questions were reviewed and, in an effort to provide equal information to all vendors, the answers to all questions were sent to all vendors. Responses from the vendor were due within five weeks after submitting the RFP.

Evaluating the Responses

While vendors were completing their responses to our RFP, each hospital selected one or two key stakeholders to participate in a selection committee. The committee developed a set of evaluation criteria that closely matched the key RFP criteria. Each criterion was weighted and assigned a score. The vendor responses were received by UHN and circulated to the partner hospitals to conduct an

independent review over a two-week period.

Our selection committee convened with the goal of narrowing down our vendor choices to two finalists, and quickly narrowed the five vendors down to three. Deciding factors were stability in the market, cost, experience in healthcare and ability to meet our needs. One unexpected discovery was the huge difference between an academic LMS and a corporate LMS. Although the differences are blurred in some products, in general, an academic LMS is geared towards academic institutions such as colleges or universities. It is usually designed around a semester intake of students with fixed start and end dates. A corporate LMS allows for a continuous intake of students and has both open-ended start and end dates. We decided that a corporate-style LMS was best suited to our needs. In an effort to narrow down our choice from three vendors to two, our group discussed and re-evaluated our priorities. We wrestled with the decision of whether to proceed with a vendor who was less experienced or with a vendor whose system seemed to be able to address both academic and corporate needs. After a serious discussion we opted for the more experienced vendor and narrowed our finalists to two vendors.

Second Vendor Demonstration

The two short listed vendors were notified and invited to return to provide a more detailed product demonstration and information session. Based on our comments and questions from the vendor responses, we developed and submitted a set of key items to both vendors to address with a request to present their responses two weeks later. During this two-week period we conducted reference checks on each of the two finalist vendors. The second round of vendor sessions was completed in one day, allowing for one 3-hour session in the morning and one 3-hour session in the afternoon. At the end of the day, the selection committee made the final decision.

RFP Timeline Example

Stage One-Vendor Selection/Short List

Date 1: RFP Distributed to Selected Vendors
Date 2: Two weeks later   Last Day for Inquiries
Date 3: One week later   Responses to Inquiries Mailed to Vendors
Date 4: Two weeks later   Proposal Closing Date
Date 5: Two weeks later   Finalists Notified

Stage Two-Testing

Date 6: Four weeks later   Testing Product Environment
Date 7: At end of testing   Vendor Selected and Notified

Lessons Learned

Through our experience with the LMS selection process, we are now able to share several tips that might prove helpful to other organizations seeking to purchase a LMS:

- *Ensure you have senior management buy-in before moving forward* **-** It is vital to have support from senior management since they are responsible for final approval to implement eLearning and LMS funding.

- *Identify your stakeholders* **-** It is also important to clearly identify key stakeholders and financial contributions early in the game. Stakeholders are important because they have a strong interest in the outcome of educational initiatives at their institutions. Key players from within our organization included Nursing Education, Nursing Informatics, Information Technology, Human Resources, Organizational Development, Allied Health, Pharmacy, the laboratories and radiation safety. Each hospital within the collaborative partnership should have one key individual to collaborate and coordinate processes within their organization.

- *Educate your stakeholders* **-** Although all our stakeholders had a vested interest in the success of eLearning, most were unclear about what was needed to make it work. A common understanding of terms, products and features is important to ensure that everyone has a clear understanding of what eLearning is and how it will affect their institution. To address this, we hired outside consultants to conduct workshops on basic eLearning concepts to all interested stakeholders.

- *Consider partnerships* - If you are not sure you can afford to purchase or manage a product on your own, consider partnering with another hospital. Our collaborative partnership was much easier than we expected because everyone had identified similar issues and had a vested interest in making eLearning work at their respective institutions.

- *Clearly define your selection criteria* **-** From a collaborative hospital perspective, it was very important that we agreed on key evaluation criteria for determining the successful vendor. A hosted solution was important to us because we did not want to place the product on one hospital's server as this would have meant that the hosting hospital would have to support and install the system and provide access through their firewall to staff from different hospitals – a situation that would only complicate the implementation process. We also looked at the vendor's stability on the market and experience in healthcare. LMS product availability included many vendors, some of whom were very new in the market and did not have a proven product. Because of the cost and complexity of having so many partner hospitals, we wanted a vendor who had experience in the market who would be around for a long time, and had a history of providing excellent customer support. Another thing to consider is that 'healthcare experience' means different things to different people. Often, vendors did not have hospital experience but had worked with a health related government agency or a pharmaceutical company.

- *Do your homework* **-** Do your research, ask questions, talk to vendors, talk to their clients, and do a site visit to gain as much information as you can prior to committing to a product. Find out as much as you can about your top few choices. Have your vendor provide references and contact them, but also search for your own information. Most vendors have a local user group. If so, ask if you can attend a meeting to get firsthand feedback from organizations already using the product. If one of your preferred vendors has an annual conference, you should consider attending.

- *Consider more than one product demonstration* – The initial product demonstration should help you to shortlist the vendors to whom you want to issue a RFP. A second demonstration is helpful when you are closer to making your final decision.

- *Provide a detailed RFP* – Although developing a detailed RFP can be painstaking and time-consuming, it does help you to define specific organizational requirements and provides the vendor with a defined format that strictly limits the type and volume of information to be included.

- *Don't let lack of funding stop you from pursuing a good idea* – This was our greatest lesson learned. Had we focused initially on lack of funds, we never would have moved forward. Once we involved key stakeholders and did our homework to build a strong case, widespread financial support for the LMS purchase was forthcoming.

Conclusion

Purchase of a technology solution through a collaborative partnership was a successful pioneering initiative for nursing in Ontario. Identification of detailed system requirements, along with specific vendor criteria, was instrumental in guiding our choice of a suitable LMS.

With the purchase of the system, the partner hospitals now share one system on one hosted server (at our vendor's site) as well as a common database. However, most features, including the "look and feel" of the eLearning interface, are managed individually by each hospital. Implementation of eLearning with a LMS will be the subject of the next article in this series.

References

Anonymous (2005). What counts most in choosing a learning management system. *HR Focus.* . *82* (10), p3-5.

Bersin, J. (2006). What you still need to know about LMSes. *Training. 43* (12), p.17.

Horton, W. & Horton, K. (2003). *E-learning tools and technologies*. Wiley Publishing: Indianapolis.

Ketter, P. (2006) Delivering training. *T and D. 60* (10), p.83-85.

Laff, M. (2007). Ringing out the old LMS. *T and D . 61* (5), p.26-26.

Plocek, M. & O'Dell M. (2007). Learning Management System Selection. *Convergent Learning LCC White Paper.* Retrieved October 26th, 2007 from
http://www.convergentlearning.com/whitepapers/ConvergentLearningLMSSelection.pdf

Rosenberg, M. (2001). *E-Learning-strategies for delivering knowledge in the digital age*. New York: McGraw-Hill.

EDITOR: Joy Fraser

APA REFERENCE: