

BC Practice Education Renewal in Health Authorities: Round 1

**Collaborative for e-orientation for
students and faculty**

**Phase 1 Final Report: Findings and
Recommendations**

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HSPnet

2 Executive Summary

This report delivers the outcomes of a study to make recommendations on the best approach for BC health authorities and academic institutions to take, in the development, design, and implementation a Learning Management System (LMS), that would be used to enhance clinical student orientation. The study was carried out between August and October 2005.

The study addresses many different aspects of an LMS, in particular, features related to the sharing teaching and learning resources via a Learning Object Repository (LOR); “out of the box” LMS cost; usability; interoperability; integration with HSP-Net student placement database, and compliance to e-learning standards. In order to make recommendations on the best approach, it was necessary to establish an LMS evaluation criteria based on the above and some additional features which will be mentioned later. A total of 19 LMS’s were evaluated, of which the Moodle LMS was concluded to be the best system to customize and implement for a proposed phase 2 pilot project. The key reasons for choosing Moodle was related to enhancing sustainability by: 1) eradicating dependency on “come and go” Internet software vendors; and 2) minimizing our upfront and ongoing software, hardware, and maintenance costs.

This report also delivers e-orientation topics needed by clinical practice students. An assessment of existing orientation programs and materials (including media materials) was conducted in order to develop an on-line template for e-orientation, employing the information that already exists regarding what students need to know before beginning each clinical placement. This template will provide guidance for clinical educators so that they can more effectively develop e-orientation programs.

3 Introduction

The objective of this study was to:

- 1. to make recommendations on the best approach for BC health authorities and academic institutions to take, in the development, design, and implementation a Learning Management System (LMS), that would be used to enhance clinical student orientation.**
- 2. to template e-orientation topics needed by clinical practice students so that clinical educators can efficiently and effectively develop e-orientation programs.**

This report is based on the findings of a study carried out between August and October 2005. The work of this study is split into five main parts:

1. description of LMS evaluation tool;
2. LMS Systems evaluated
3. comparison of 19 LMS's via the evaluation tool
4. content template development
5. project team recommendations

4 Background

4.1 *The Problem*

In order to assure optimal placement experiences for students from the health and human service sector, they need to be involved in a full orientation prior to their placement for practice education. Orientation information for new students traditionally has been prepared in a variety of paper and electronic formats by receiving programs and education providers. However, this has resulted in much duplication of effort across programs, risks of out-of-date information, and significant costs for development and maintenance (printing, videos, etc.) as well as providing, in many cases, a less than complete orientation for students. When students arrive for their placement, practice educators are often very busy with patients, and thus not be able to take the time to carefully explain information, policies and guidelines about the clinical environment that would enhance the student's knowledge and placement experience.

At the same time, in-person orientations often present too much information at once for students to absorb, remember, and use correctly and effectively. These in-person events also take significant staff time and are therefore expensive for health authorities to provide. The result of these haphazard approaches to orientation results in less-than-optimal practice education experiences across the province since students are not fully prepared, while at the same time, HA and PSE partners are spending time and resources on repetitive orientation efforts, taking away from both the quality of placement experiences and the quantity of student placements they are able to manage.

4.2 *What is an LMS?*

While there are several definitions of a learning management system (LMS), the basic description is a software application that automates the administration, tracking, and reporting of training events. However, it's not that simple. A robust LMS should be able to do the following:

- centralize and automate administration
- use self-service and self-guided services
- assemble and deliver learning content rapidly
- consolidate training initiatives on a scalable web-based platform
- support portability and standards
- personalize content and enable knowledge reuse.
- integrate with other enterprise application solutions

4.3 How an LMS can solve our student practice orientation problems?

Problem	LMS Solution
Students are receiving their hard-copy orientation packages once they arrive at a receiving program or some time after.	An LMS can deliver student practice orientation prior to the individual arriving at the receiving site and program. Orientation information can be made available to a student at anytime and at anyplace with an Internet connected personal computer.
Many orientation manuals that are provided to practice students in the form of a hard-copy or CD contain out-of-date information	LMS's feature a Power-Point like end-user interface that make it easy for clinical educators and instructors to be able to easily and instantly update e-orientation content.
There are significant costs for the development and maintenance of current orientation materials	<p>With an LMS, there is no need to:</p> <ul style="list-style-type: none"> • repeatedly go through the print shop bottleneck of printing updated orientation manuals • inform colleagues and students that the old manual is out of date. <p>As well, the time clinical content developers will spend on developing orientation will be dramatically shorter as they will be able to access the LMS Learning Object Repository to view and re-use e-orientation learning objects already created by their peers within and external to their health authority and/or academic site.</p>
When students arrive for their placement, practice educators are often very busy with patients, and thus not be able to take the time to carefully explain information, policies and guidelines about the clinical environment that would enhance the student's knowledge and placement experience.	<p>Practice educators who use the LMS to create e-orientation content will spend significantly less time developing and updating their orientation materials, hence, they will have more time to guide students.</p> <p>Information such as student policies and guidelines can be inserted into an LMS text placeholder which would permit the content to be viewed online by practice students. Practice educators therefore may not need to spend the time with students reviewing policies and guidelines in-person.</p>
In-person orientations often present too much information at once.	Orientation materials within an LMS can be presented in independent "digestible information chunks" in which the student user can proceed at their own pace, book-marking their progress shall they want to rest and return to the e-orientation at a later time.
Tracking of orientation knowledge is labour intensive	LMS's can provide automated tracking data on students who have successfully completed the required e-orientation(s)

5 Methodology

5.1 LMS evaluation tool

Based on the needs of the BC student practice education community, an LMS evaluation tool was created, and includes the following 4 factors:

LMS Factor	How LMS Factor was Measured
1. Cost	<ul style="list-style-type: none"> • Cost of LMS (LMS's over \$75,000 were not considered) • Implementation Timeline (refers to how quickly the LMS can be implemented at a new site)
2. Ease of Use	<ul style="list-style-type: none"> • User Populations (volume of users and organizations using the LMS) • Customization (refers to the level of flexibility of the LMS in enabling clients to customize the end user interface) • Searchable Learning Object Repository (storing and accessing meta-tagged content, assets, resources)
3. Student Access	<ul style="list-style-type: none"> • LMS Standards and Compliance (standards enable e-orientation content and design to be more easily shared, re-used, and exported to other systems) • User Information (refers to the types of industries using the LMS; greater volume and variety = higher rating)
4. HSP Net Integration	<ul style="list-style-type: none"> • Third Party Interoperability and Integration (refers to the ability of the LMS to integrate with 3rd party e-learning content) • Third Party Application Program Interface) API Capability (refers to the level of flexibility in enabling a 3rd party developer to customize LMS functionality and features)

5.2 LMS Systems Evaluated

The following table outlines general information on vendors included in the evaluation.

LMS	Company	Contact Info.	Notes
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LMS	Company	Contact Info.	Notes
1 Allen Learning Portal	Allen Communication Learning Services	5 Triad Center 5th Floor Salt Lake City UT 84180 Phone: 800-328-7850 Fax: 801-537-7805	Information found on this product was from searching the internet. Unable to make contact with company for first hand information on product within timeframe.
2. CESEI LMS	Centre of Excellence in Surgical Education & Innovation	3602-910 W. 10th Avenue Vancouver, BC V6Z 4E3 Fax: 604-875-5832 Phone: (604) 875-5143	Information on this product was provided by IT Manager Mr. Ferooz Sekandarpoor Phone: (604) 875-4111 x 66604
3. DOTS – Dynamic Online Training System	WebRaven	#404, 303 Adelaide St, GPO Box 607 Brisbane, Qld 4001 Ph: +61 7 3220 2229 Fax: +61 7 3220 2280 E-ail: info@dotslms.com Brian Clark Managing Director WebRaven Pty Ltd Tel: +61 (0)7 3220 2229 Mob: +61 (0)404 379 365 brian@webraven.com.au	Information on this product was found through web research; online request forms and email from Brian Clark.
4. Evolution Manager (ELM)	Outstart Inc.	745 Atlantic Avenue, Fourth Floor Boston, MA 02111 Phone: 617.897.6800 Fax: 617.897.6801 www.outstart.com Lauren Carlson Sales (919) 760 1178	Information on this product was received from web research; technical support calls.
5. How to Master Learning Management	InfoSource Inc.	6947 University Blvd. Winter Park, FL 32792 General: isisale@howtomaster.com Telephone: (407) 677-0300 Fax: (407) 677-9226 Toll Free: (800) 393-4636 Canada: (800) 253-2995 Kacy McClean Marketing Director 407-677-0300 x358 kmclean@howtomaster.com	Information on this product was received via web research; limited from email and over the phone.
6. IntraLearn XE	IntraLearn Software Corp.	World Headquarters 276 West Main Street	This company has been very helpful and available to provide

LMS	Company	Contact Info.	Notes
		<p>Northboro, MA 01532 Email: info@intralearn.com Phone: 508-393-2277 Fax: 508-393-6841</p> <p>Evan Lenson 276 West Main Street Northboro, MA 01532 Tel: 508-393-2277 ext: 231 elenson@intralearn.com www.intralearn.com</p>	all information to date via phone and email. Provided access to username and passwords for demonstrations and many customized systems they have provided for companies.
7. Intranet U Enterprise Learning Management System	Intranet U	No information available	Unable to gain a contact person for information on this program.
8. iPerform	Integrated Performance Systems	<p>111 Water St. East Dundee, IL 60118 Email: info@ips-inc.com Tel: 847.836.1800 fax: 847.836.1818</p> <p>Mike Ward MWard@ips-inc.com 847.235.3650</p>	Information on this product was available via web research and email from Mike Ward.
9. LMSLive	Wizdom Systems	<p>World Headquarters 1300 Iroquois Avenue Naperville, IL 60563 Phone (630) 357-3000 Fax (630) 357-3059</p> <p>Steve Kroll Tel: 630.357.3000 x3010 mailto:skroll@wizdom.com www.wizdom.com</p>	Information on this product was received from web research and limited information from technical support via phone. Steve Kroll called and is sending some screen shots.
10. Meridian KSI Knowledge Centre	Meridian Knowledge Solutions Inc.	<p>4465 Brookfield Corporate Dr., Ste. 201 Chantilly, VA 20151-1610 (Map) Phone: 703-322-9565 Fax: 703-322-9568 http://www.meridianksi.com</p> <p>Kevin Jeske Sales/Business Development Tel: (703) 322-9565 ext. 186 Fax: (703) 322-9568 kjeske@meridianksi.com</p>	Information on this product was readily available from the website; email and over the phone. Kevin said that they don't have samples of the program on the web, but was willing to help out sending screen captures or demos.
11. Moodle	Open Source Technology available via moodle.org		
12. Novations Ready	Novations Learning	Not available	Lattitude Consulting Group has

LMS	Company	Contact Info.	Notes
Solutions LMS	Technologies	Listed contact for Latitude: Kurt Crisman (888) 577-2797 x120 info@latitudecg.com	acquired Novations Learning Technologies.
13. OnTrack for Training Product Suite	DK Systems	444 N. Michigan Avenue Suite 3300 Chicago, IL 60611 Tel: 312.644.2700 Fax: 312.644.2703 Support: 800.552.6552 Kristen Bowen Account Manager Tel: (609) 296-4898	No information available on this product. It appears they have been bought by another company. Never received an answer after leaving phone messages.
14. Syntrio Enterprise LMS	Syntrio	Gail Cohan VP, Sales San Francisco, CA 415-951-7913 ext. 3412 gcohan@syntrio.com www.syntrio.com	Information on this product was readily available on the web as well as from Gail for access to username and passwords for demonstrations. Still waiting on more information from Gail as to part 2 (SLOR and API).
15. Tracker.Net	Platte Canyon Multimedia Software Corp.	8870 Edgefield Drive Colorado Springs Colorado 80920 USA Phone: (719) 548-1110 Fax: (719) 548-1114 sales@plattecanyon.com support@plattecanyon.com Jeff Rhodes jrhodes@plattecanyon.com	Information for this product was readily available from the web and Jeff was helpful in providing screen shots and web sites for examples.
16. Training Partner 2003	GeoMetrix Data Systems Inc.	Corporate Headquarters GeoMetrix Data Systems 10th Floor, 747 Fort Street, Victoria, BC Canada V8W 3E9 General Inquiries: Tel: (250) 361-9300 Fax: (250) 361-9362 Karla Willems Tel: (250) 361-9300 ext.224 Fax: (250) 361-9362 10th Floor, 747 Fort St Victoria, B.C. V8W 3E9 Karla.Willems@TrainingPartner.com www.TrainingPartner.com	Information on this product was available through support ticket forms online and email. The company provided a lot of information upon request.
17. Virtual Training Assistant	RISC	RISC, Inc. 17041 El Camino Real	Information still pending; inquiry sent via web form from the web

LMS	Company	Contact Info.	Notes
		Suite 101 Houston, Texas 77058 (281) 480-7910 http://www.risc-inc.com/indexnoflash.htm	address listed.
18. Webmentor LMS	Avilar Technologies	6760 Alexander Bell Drive Suite #105 Columbia, MD 21046 Sales & Support:(410) 290-0008 Toll-free: (888) 873-7014 Fax: (410) 290-2988 Tom Mackinson Sales Tel: (410) 961-5526 mackinson@avilar.com	Information available via web research; email and phone conversations with Tom Mackinson. Very helpful in providing information and access to web sites for example customized systems.
19. Xtension Learning Management System	Xtension Inc.	Justin Reilly office 803-732-3080 x229 cell 803-730-2948 www.xtention.net	Justin has been very helpful in providing information via email and screen shots.

5.3 LMS Technical Evaluation Summary

5.3.1 Top 5: Timeline for Implementation (refers to the LMS's that were the quickest to implement)

System (company)	Rating
WebMentor LMS (Avilar Technologies Inc.)	5
Tracker.Net (Platte Canyon Multimedia Software Corp.)	5
LMSLive (Wizdom Systems Inc.)	5
IntraLearn XE (IntraLearn Software Corp.)	5
Evolution Learner Manager (ELM) (OutStart Inc.)	4
Syntrio Enterprise LMS (Syntrio)	4
How to Master Learning Management System (InfoSource Inc.)	4

Note that 3 of the systems had the same rating of 4/5 (tie for 2nd place).

5.3.2 Top 9: Pricing Estimates (refers to the LMS's that met our "installed" pricing criteria of \$75,000 or less)

System (company)	Meet Pricing restriction for Installed	Meet Pricing restriction for Hosting
Virtual Training Assistant (RISC)	Yes	Yes
Tracker.Net (Platte Canyon Multimedia Software Corp.)	Yes	Yes
How to Master Learning Management System (InforSource Inc.)	Yes	Yes
Allen Learning Portal (Allen Communication Learning Services)	Yes	Yes
IntraLearn XE	Yes	No
LMS Live (Wizdom Systems Inc.)	Yes	No
Xtension LMS	Yes	No
Moodle LMS	Yes	No
CESEI LMS	Yes	Yes

5.3.3 Top 5: Highest User Populations (refers to the LMS with the highest number of organizations/registered learners)

System (company)	Rating
IntraLearn XE (IntraLearn Software Corp.)	5
OnTrack for Training Product Suite (DKSystems)	5
How to Master Learning Management System (InfoSource Inc.)	4
Training Partner 2003 (GeoMetrix Data Systems Inc.)	4
Virtual Training Assistant (RISC)	4

5.3.4 Top 9 in Customization (refers to how well the LMS enables user interface customization)

System (company)	Rating
DOTS - Dynamic Online Training System (WebRaven)	5
Evolution Learner Manager (ELM) (OutStart Inc.)	5
IntraLearn XE (IntraLearn Software Corp.)	5
iPerform (Integrated Performance Systems)	5
Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	5
WebMentor LMS (Avilar Technologies Inc.)	5
Xtention Learning Management System (Xtention Inc.)	5
Moodle	5
CESEI	5

Note that 8 of the systems had the same rating of 5/5.

5.3.5 Top 6 in Learning Object Repository (LMS features an LOR)

System (company)	Rating
IntraLearn XE (IntraLearn Software Corp.)	5
LMSLive (Wizdom Systems Inc.)	5
Training Partner 2003 (GeoMetrix Data Systems Inc.)	5
WebMentor LMS (Avilar Technologies Inc.)	5
Xtention Learning Management System (Xtention Inc.)	5
Moodle	5

Note that 6 of the systems had the same rating of 5/5.

5.3.6 Top 6 in LMS Standards and Compliance Information

System (company)	Rating
iPerform (Integrated Performance Systems)	5
Training Partner 2003 (GeoMetrix Data Systems Inc.)	5
OnTrack for Training Product Suite (DKSystems)	5
Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	5
Moodle	4
IntraLearn XE (IntraLearn Software Corp.)	4

Note that 2 of the systems had the same rating of 4/5.

5.3.7 Top 5 in User Information (refers to the types of industries using the LMS; greater volume and variety = higher rating)

System (company)	Aggregate Percentage	Rating
OnTrack for Training Product Suite (DKSystems)	98%	5

Novations Ready Solutions LMS (Novations Learning Technologies)	90%	5
Virtual Training Assistant (RISC)	80%	4
Intranet U Enterprise Learning Management System (Intranet U)	80%	4
Training Partner 2003 (GeoMetrix Data Systems Inc.)	76%	4

Note that “iPerform (Integrated Performance Systems)” offers no corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners).

Note that “OnTrack for Training Product Suite (DKSystems)” offers no corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation.

5.3.8 Top 5 in Third Party Interoperability and Integration (refers to the ability of the LMS to integrate with 3rd party e-learning content)

System (company)	Rating
Moodle	5
Training Partner 2003 (GeoMetrix Data Systems Inc.)	5
iPerform (Integrated Performance Systems)	5
IntraLearn XE (IntraLearn Software Corp.)	5
WebMentor LMS (Avilar Technologies Inc.)	4

5.3.9 Top 5 in Third-Party API Capability (refers to the level of flexibility in enabling a 3rd party developer to customize LMS functionality and features)

System (company)	Rating
Moodle	5
WebMentor LMS (Avilar Technologies Inc.)	5
Training Partner 2003 (GeoMetrix Data Systems Inc.)	5
CESEI	5
IntraLearn XE (IntraLearn Software Corp.)	4
iPerform (Integrated Performance Systems)	4

5.4 Content Template Development

5.4.1 Framework

The e-orientation initiative is targeted towards students and academic instructors in the medical and health programs such as medicine, nursing, and allied health professions including pharmacy, physiotherapy, occupational therapy, social health and unit clerks.

The template is customized to include students and AIs involved in education practice experiences such as observational visits, education practice experiences, residency, specialized training (doctors or nurses skills upgrade) and cross and interprofessional training and experiences among hospitals and disciplines. Students also include individuals participating within the BC Health Care Network who are not local residents, but students from out-of-province and foreign health professionals seeking education practice experiences.

5.4.2 Data Source

1. current orientation packages used by HAs, hospitals, units, AIs, CEs and students. The various formats and types of orientation resources currently include:

- Media presentations: CDs, Video, PowerPoint presentations, media
 - Guided tours, site-maps
 - Orientation checklists (PDFs, document)
 - Website: internet, intranet
 - policy and procedure manuals
2. Approximately thirty percent of the total research is based on feedback and recommendations from students and AIs responses conducted through interviews and surveys. Over forty stakeholders participated in the survey or questionnaire which included nineteen students, twenty AIs and five preceptors.
3. New employee orientation information was collected to represent the general overview of the necessary aspects of orientation (Micro-level 1) needed to be included when certain health disciplinary student orientation information was not available to research.

5.4.3 Content Template

Organizational Level	Unit Level
Reference, Knowledge & Prerequisites	Reference, Knowledge & Prerequisites
<p><u>Mission, Vision, Values</u></p> <ul style="list-style-type: none"> • Health Authority • Hospital <p>Strategic Plan Reporting Structure Hospital Orientation Guide</p> <p><u>Organizational Structure/Chart</u></p> <ul style="list-style-type: none"> • Site and Building Map • Health Services Area • Facilities Listing (acute care hospital, long term, residential care and health units) (link) • Clinics • Foundation <p><u>Hospital Policy & Procedures</u></p> <ul style="list-style-type: none"> • Quality Assurance • Risk Management • Legal issues • Insurance & Liability • WCB Requirements • Professional Conduct & Behaviour Policy • Professional Practice Office • Code of Ethics <p>Aboriginal Health Volunteer Resources Spiritual/Pastoral Care</p>	<p><u>Unit policy, procedures, guidelines, goals</u></p> <p>Orientation Guide Clinical Unit Structure/Chart Unit Site map Unit Tour (introduction to Staff)</p> <p><u>Unit Profile</u></p> <ul style="list-style-type: none"> • Values, Philosophies, and Beliefs • Unit culture • Programs and functions • Hours of Service • Team Members – contact information • Type of nursing and staffing on unit • Nurse/Patient Ratio • Patient population and common diagnosis • Common procedures, tests, treatments • Relationships with other departments and units • Terminology & References <p><u>Rotation/Schedule</u></p> <ul style="list-style-type: none"> • Shift, break, and report/routines • Late, sick, or absent-reporting procedure • Holidays/vacation • Statutory Holidays

Interpretation Service

Information and Privacy (Freedom of Information and Protection of Privacy Act (FOIPPA))

- Ownership of Health Record
- Guidelines for Release of Patient Information
- Confidentiality, security and Release of Information

Access to Patient/Client Information (Health Record)

- Paper-based records
- Electronic records

Client Relations office

Media relations Guidelines

Legal issues

Risk Management

Violence in Work Place

Human Rights Policy

Diversity Policy

Conflict Management

Mandatory Training and Certifications

- Criminal record check
- CPR
- Workplace Hazardous Material
- Fire Safety
- Freedom of Information
- Respiratory Mask Fitting
- Others

Photo Identification

Immunization Requirements

Infection Control

Career opportunity

HR Consulting Services

Learning and Development

Technology/Electronic Communication

- Telephone and Service Directories
- Computer system Access
- Voicemail
- Pager
- Email
- Internet/intranet
- Voice communication

Wellness and Safety

- Joint Occupational Health & Safety

Unit Policy & Procedures

- Quality Assurance
- Clinical Conduct
- Dress Codes
- Confidentiality
- Mandatory Training & Certification
- Procedures/ Protocols
- Communication System
- Rounds/Meetings
 - Presentation guidelines

Patient Care

Procedures

- In-patient
 - Patient Order - procedures
 - Room schedules
- Out-patient
- Referrals

Outpatient Services

- Clinic/program information

Inpatient Services

- Wards
- Emergency unit

Patient Assessment and Procedures

- Measurement/assessment criteria
- Case Type/Studies
- List of Patient Procedures
- Lab information and Access
- Reporting structure
- Charting, Labelling
-

Equipment, Supplies, Storage (Access, Procedures)

Reference, Manuals and Resources, Forms

Health Records Access and Procedures

Education and training

- Evident Based (Guidelines, Protocols, Pathway)
- role description
- Student Policy & Learning Pathways
- Student expectations and objectives
- Education Worksheet
- Student evaluation
- Training Progress Report
- Policy and Procedures Manual
- Instructor - Responsibilities, Division of duties Evaluation & Assessment

Staff meetings and in-services

<ul style="list-style-type: none"> Committees (JOHSC) • Hazard Reporting • Workplace Hazardous Materials Information System (WHMIS) • Material Safety Data Sheets (MSDS) • Musculoskeletal Injury Prevention (MSIP) • Managing Aggressive Behaviour (MAB) • Blood & Body Fluid (BBF) Exposure/Communicable Diseases • Pre-Employment Health Assessment and TB Testing <p><u>Health & Immunization requirement</u></p> <ul style="list-style-type: none"> • Immunity & Health Status • Requirements • Measles • Rubella • Mumps • Diphtheria • Varicella • Tetanus • Polio • Hepatitis B • Flu Vaccines <p><u>Wellness and safety offices</u></p> <ul style="list-style-type: none"> • Accident and injury reporting • Accident investigations • Standard precautions • Hand washing <p><u>Safety Procedures</u></p> <ul style="list-style-type: none"> • Codes • Crash cart • ABC Box • Resuscitation Masks • Emergency Evacuation Kit Telephone numbers • Manuals • Incident Reports <p><u>Emergency Response Codes</u></p> <ul style="list-style-type: none"> • Code Blue • Code Red – Fire Safety Procedures • Code Black– Bomb Threats Guidelines, Procedures <p><u>Protection services</u> (fire, security, parking, traffic control)</p> <ul style="list-style-type: none"> • Parking/Bike Racks (location, cost) • Hospital security • Valuable property • Large areas (rooms, entrances, hallways, parking area) • Goals (personal, property and facility 	<ul style="list-style-type: none"> • White Board (unit policy) • Posting boards locations • Bulletin boards • Meeting minutes • Journal lists • Communication books • Videotapes (Supplies) • Personal calls and visitors • Personal use of hospital property <p><u>Unit specific communication and information systems</u></p> <ul style="list-style-type: none"> • Intranet • Electronic mail • computer systems • Telephone system – voicemail • Mail system • Pager • Photocopier • Fax machines • Personal computers and computer security <p><u>Protection Services</u></p> <ul style="list-style-type: none"> • Unit specific health and safety issues • Safekeeping belongings • Keys • Fire Extinguishers - location • Fire procedures – unit level • Emergency Procedure /Kits • Location of Emergency equipment and Procedures (crash cart, wash station) <p><u>Administrative services</u></p> <ul style="list-style-type: none"> • Clinical • Organization <p><u>Staff services</u></p> <ul style="list-style-type: none"> • Locker rooms and showers • Washrooms
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protection)

Disaster & Emergency Preparedness

Emergency Plan/Preparedness (types)

- Fire severe weather
- Hazardous Material spill
- Transportation accidents
- Earthquakes
- Pandemic
- Tsunami
- Dam failure
- Flood
- Civil unrest
- Terrorism
- Epidemic
- Water contamination
- Utility outage
- Volcano
- Nuclear disaster

Patient Care Risk Management

- Patient Identification
- Missing person search plan
- Management of Aggressive/Abusive Behaviour
- Multiple Drug Resistant Bacteria
- Research in Affiliation with Teaching Hospitals
- Communication of Emergency Codes

Navigating

Commuter options & Shuttle service

- Schedule

Traffic and parking

- staff vehicle parking
 - instruction, cost, location

After Hour Entrance

Staff Services and Resources

Lost & Found

Cafeteria services

Library Resource

Pharmacy Services

Lab Access

Media Services

Transcription Services

Gift/Shops

Pay phones

Bank Machines

Key guidelines/policies for students

Smoking

<p>Abuse patient, Resident, Tenant Care</p> <p>Attendance</p> <p>Personal appearance/Dress codes</p> <p>Photo Identification</p> <p>Substance use</p> <p>Hospital equipment Supplies</p> <ul style="list-style-type: none"> • access • procedures • online Resources <ul style="list-style-type: none"> ○ manuals ○ intranet <p>Hospital Equipment, Supplies</p> <p>Access</p> <p>Procedures</p> <p><u>Administration Services</u></p> <ul style="list-style-type: none"> • Human Resources <ul style="list-style-type: none"> Career Opportunities Remuneration (Finance) 	
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6 Phase 1 Summary

6.1 All Evaluated Systems Sorted by Number of times LMS system placed in top 5

LMS	Number of time LMS system placed in top 5	Meets Pricing Constraints?	User Populations	Customizable?	Searchable Learning Object Repository?	Large user population?	Short implementation time?	User Information Category?	Third-Party API Capability	LMS Standards and Compliance Information
Intralearn XE	8	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Training Partner 2003	6		Yes		Yes	Yes		Yes	Yes	Yes
Moodle	5	Yes		Yes	Yes				Yes	Yes
WebMentor	4			Yes	Yes		Yes		Yes	
OnTrack	4		Yes			Yes		Yes		Yes
CESEI	3	Yes		Yes					Yes	
IPerform	3			Yes					Yes	Yes
Xtension	3	Yes		Yes	Yes					
Virtual Training Ass.	3	Yes	Yes			Yes		Yes		
LMS Live	3	Yes			Yes		Yes			
How to Master...	3	Yes	Yes			Yes	Yes			
Tracker.Net	2	Yes					Yes			
Meridian KSI	2			Yes						Yes
Evolution	2			Yes			Yes			
Syntrio	1						Yes			
Novations	1							Yes		
Intranet U	1							Yes		
DOTS	1			Yes						
Allen Learning	1	Yes								

The evaluation of the 19 LMS's, using our evaluation tool revealed 2 leading candidates that would be suitable for Phase 2 of this project – the development and pilot roll-out of an e-orientation LMS. They are as follows:

- Intralearn XE: (8 of 9 criteria met) 89% adherence to LMS evaluation tool
- Moodle: (5 of 9 criteria met) 56% adherence to LMS evaluation tool

Most importantly, both systems can be purchased and customized under the Phase 2 LMS “out of the box” budget constraint of \$75,000 CDN. Systems that couldn't fall under the pricing constraints of Phase 2 were not considered as the project team members determined that at least \$125,000 needed to be invested towards HSP Net integration, graphic and template design, and user support/training.

7 Recommendations for Phase 2 Project: Implementation of LMS for E-orientation

7.1 LMS Phase 2 Recommended Goal

Develop and pilot test the Moodle at one health authority.

The project team chose Moodle over Intralearn XE for the following reasons:

- **Cost/sustainability:** Intralearn involved an up-front cost of approximately \$65,000 for the first year, and was attached with ongoing annual fees, while the Moodle LMS is available at no cost.
- We concluded that the open source code would provide phase 2 project team members with maximum flexibility to customize user interfaces and user tracking information.
- We didn't want to be dependent on an LMS vendor in a technology market where Internet software companies "come and go".
- Although Intralearn XE scored higher than Moodle using our LMS evaluation tool, the project team concluded that the additional cost outweighed the benefits, and we felt we can produce the benefits Intralearn XE provides by efficiently enhancing Moodle in Phase 2.

7.2 Project Roles Recommendation

- **Project Manager:** project planning and reporting; oversee and support activities of project team; manages the budget.
- **Programmer(s)/Developer(s):** interface the Moodle database with the HSP net database so that student profile access and tracking are integrated. Develop a learning object repository which features a simple "drag and drop" re-use technique; enhance content expert developer screens and end user navigation; enable content developers to use an already developed e-orientation module as a course content and design template to create their own module.
- **Graphic/Template Designer:** design the Moodle user interface with the HSP net's current "look and feel"; create PowerPoint-like e-orientation page templates; develop engaging multimedia which would result in a high level of re-usability.
- **End-user Support/Training:** teach and support content developers in creating Moodle e-orientation pages; create and enforce e-orientation object re-use policy; develop an LMS user guide; develop an online content developer community to nurture collaborative effort and problem solving.

Appendix A - Detailed Technical Assessment Report

1 Cost Comparison

1.1. Pricing Estimates

Rating criteria based on if these systems fall under the original maximum budget of \$75,000 CDN (~\$63,800 USD). No Rating system is used other than a yes / no. Hosted and installed solutions evaluated separately.

Prices listed in table below are in USD (1 CAD = 0.845414 USD).

System (company)	Installed Rating	Pricing estimate for an installed solution	Hosted Rating	Pricing estimate for a hosted solution
Allen Learning Portal (Allen Communication Learning Services)	Yes	Year 1 costs: 25,000 users = \$30,000 Year 3 pricing: 25,000 users = \$42,000	Yes	Year 1 costs: 25,000 users = \$40,800 Year 3 pricing: 25,000 users = \$52,800
CESEI	Yes	Year 1 costs: 25,000 users = \$45,000 Year 3 pricing: 25,000 users = \$65,000	Yes	Year 1 costs: 25,000 users = \$40,800 Year 3 pricing: 25,000 users = \$52,800
DOTS - Dynamic Online Training System (WebRaven)	No	Year 1 costs: 25,000 users = \$125,000 Year 3 pricing: 25,000 users = \$181,250	No	Year 1 costs: 25,000 users = \$191,000 Year 3 pricing: 25,000 users = \$379,250
Evolution Learner Manager (ELM) (OutStart Inc.)	No	Year 1 costs: 25,000 users = \$236,000 Year 3 pricing: 25,000 users = \$308,000	No	Year 1 costs: 25,000 users = \$308,000 Year 3 pricing: 25,000 users = \$524,000
How to Master Learning Management System (InforSource Inc.)	Yes	Year 1 costs: 25,000 users = \$43,500 Year 3 pricing: 25,000 users = \$75,500	Yes	Year 1 costs: 25,000 users = \$40,000 Year 3 pricing: 25,000 users = \$72,000
IntraLearn XE (IntraLearn Software Corp.)	Yes	Year 1 costs: 25,000 users = \$57,500 Year 3 pricing: 25,000 users = \$72,500	No	Year 1 costs: 25,000 users = \$85,000 Year 3 pricing: 25,000 users = \$115,000
Intranet U Enterprise Learning Management System (Intranet U)	No	Year 1 costs: 25,000 users = \$277,000 Year 3 pricing: 25,000 users = \$363,000	No	Year 1 costs: 25,000 users = \$299,000 Year 3 pricing: 25,000 users = \$421,000

iPerform (Integrated Performance Systems)	No	Year 1 costs: 25,000 users = \$255,000 Year 3 pricing: 25,000 users = \$655,000	No	Year 1 costs: 25,000 users = \$225,000 Year 3 pricing: 25,000 users = \$625,000
LMSLive (Wizdom Systems Inc.)	Yes	Year 1 costs: 25,000 users = \$35,000 Year 3 pricing: 25,000 users = \$47,600	No	Year 1 costs: 25,000 users = \$312,000 Year 3 pricing: 25,000 users = \$343,750
Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	No	Year 1 costs: 25,000 users = \$394,000 Year 3 pricing: 25,000 users = \$502,000	No	Year 1 costs: 25,000 users = \$481,500 Year 3 pricing: 25,000 users = \$656,500
Moodle LMS	Yes	Software for LMS free	No	N/A
Novations Ready Solutions LMS (Novations Learning Technologies)	No	Year 1 costs: 25,000 users = \$208,800 Year 3 pricing: 25,000 users = \$258,400	No	Year 1 costs: 25,000 users = \$317,500 Year 3 pricing: 25,000 users = \$947,500
OnTrack for Training Product Suite (DKSystems)	No	Year 1 costs: 25,000 users = \$96,500 Year 3 pricing: 25,000 users = \$135,100	No	Year 1 costs: 25,000 users = \$105,000 Year 3 pricing: 25,000 users = \$147,000
Syntrio Enterprise LMS (Syntrio)	No	Year 1 costs: Vendor specializes in hosted implementations and has not provided pricing for an installed solution. Year 3 pricing: Vendor specializes in hosted implementations and has not provided pricing for an installed solution.	No	Year 1 costs: 25,000 users = \$100,000 Year 3 pricing: 25,000 users = \$280,000
Tracker.Net (Platte Canyon Multimedia Software Corp.)	Yes	Year 1 costs: 25,000 users = \$9,990 Year 3 pricing: 25,000 users = \$11,980	Yes	Year 1 costs: 25,000 users = \$11,190 Year 3 pricing: 25,000 users = \$15,580
Training Partner 2003 (GeoMetrix Data Sysems Inc.)	No	Year 1 costs: 25,000 users = \$120,000 Year 3 pricing:	No	Year 1 costs: 25,000 users = \$225,000 Year 3 pricing:

		25,000 users = \$170,000		25,000 users = \$495,000
Virtual Training Assistant (RISC)	Yes	Year 1 costs: 25,000 users = \$32,641 Year 3 pricing: 25,000 users = \$44,641	Yes	Year 1 costs: 25,000 users = \$30,380 Year 3 pricing: 25,000 users = \$81,140
WebMentor LMS (Avilar Technologies Inc.)	No	Year 1 costs: 25,000 users = \$75,000 Year 3 pricing: 25,000 users = \$105,000	No	Year 1 costs: 25,000 users = \$140,000 Year 3 pricing: 25,000 users = \$400,000
Xtension Learning Management System (Xtention Inc.)	Yes	Year 1 costs: 25,000 users = \$60,000 Year 3 pricing: 25,000 users = \$90,000	No	Year 1 costs: 25,000 users = Vendor would not provide this information Year 3 pricing: 25,000 users = Vendor would not provide this information

1.2. Timeline for Implementation

Rating criteria based on average implementation time.

System (company)	Hosted solution options	Average implementation time	Rating
Allen Learning Portal (Allen Communication Learning Services)	This company specializes in providing a hosted solution and offers a full range of hosted products and services.	High range = 24 weeks Low range = 6 weeks Average time = 12 weeks	1
CESEI	Specializing in providing hosted solutions, with a complete range of hosted options.	High range = 8 weeks Low range = 2 weeks Average time = 4 weeks	3
DOTS - Dynamic Online Training System (WebRaven)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 12 weeks Low range = 1 weeks Average time = 2-4 weeks	3
Evolution Learner Manager (ELM) (OutStart Inc.)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 2 weeks Low range = 0.6 weeks Average time = 1 week	4
How to Master Learning Management System (InfoSource Inc.)	This company specializes in providing a hosted solution and offers a full range of hosted products and services.	High range = 2 weeks Low range = 0.5 weeks Average time = 1 week	4

System (company)	Hosted solution options	Average implementation time	Rating
IntraLearn XE (IntraLearn Software Corp.)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 1 weeks Low range = .2 weeks Average time = .4 week	5
Intranet U Enterprise Learning Management System (Intranet U)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 16 weeks Low range = 3 weeks Average time = 8 weeks	2
iPerform (Integrated Performance Systems)	This company specializes in providing a hosted solution and offers a full range of hosted products and services.	High range = 14 weeks Low range = 2 weeks Average time = 8 weeks	2
LMSLive (Wizdom Systems Inc.)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 1 weeks Low range = 0.2 week Average time = 0.2 week	5
Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 12 weeks Low range = 1 weeks Average time = 6 weeks	3
Moodle	Information not available. See Appendix P for detailed document on Moodle features	Information not available. See Appendix P for detailed document on Moodle features	0
Novations Ready Solutions LMS (Novations Learning Technologies)	This company specializes in providing a hosted solution and offers a full range of hosted products and services.	High range = 12 weeks Low range = 4 weeks Average time = 8 weeks	2
OnTrack for Training Product Suite (DKSystems)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 6 weeks Low range = 2 weeks Average time = 3 weeks	3

System (company)	Hosted solution options	Average implementation time	Rating
Syntrio Enterprise LMS (Syntrio)	This company specializes in providing a hosted solution and offers a full range of hosted products and services.	High range = 4 weeks Low range = 1 weeks Average time = 1.5 weeks	4
Tracker.Net (Platte Canyon Multimedia Software Corp.)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 1 week Low range = 0.1 week Average time = 0.2 week	5
Training Partner 2003 (GeoMetrix Data Systems Inc.)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 24 weeks Low range = 1 week Average time = 12 weeks	1
Virtual Training Assistant (RISC)	This company specializes in providing a hosted solution and offers a full range of hosted products and services.	High range = 52 weeks Low range = 6 weeks Average time = 12 weeks	1
WebMentor LMS (Avilar Technologies Inc.)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 2 weeks Low range = .5 week Average time = 1 week	5
Xtention Learning Management System (Xtention Inc.)	Most of this company's clients will locally install their LMS solution on their server. This company does, however, offer a hosted solution as part of their package of services for customers who are looking for a hosted solution.	High range = 10 weeks Low range = 1 week Average time = 4 weeks	3

2 Ease of Use

2.1. User Populations

Rating criteria based on larger total companies using the system the higher the rating.

System (company)	Number of organizations using this LMS	Total number of registered learners worldwide	Largest "behind-the-firewall" implementation to date (# of learners)	Largest "hosted" implementation to date	Rating
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System (company)	Number of organizations using this LMS	Total number of registered learners worldwide	Largest "behind-the-firewall" implementation to date (# of learners)	Largest "hosted" implementation to date	Rating
Allen Learning Portal (Allen Communication Learning Services)	5	22,000	15,000	500	0
CESEI	13	450	450	2000	0
DOTS - Dynamic Online Training System (WebRaven)	41	100,000	8,000	5,500	2
Evolution Learner Manager (ELM) (OutStart Inc.)	31	120,000	12,000	0	2
How to Master Learning Management System (InfoSource Inc.)	325	500,000	47,000	16,000	4
IntraLearn XE (IntraLearn Software Corp.)	1,200	2,000,000	17,000	165,000	5
Intranet U Enterprise Learning Management System (Intranet U)	36	250,000	98,000	15,000	2
iPerform (Integrated Performance Systems)	27	180,000	10,000	30,000	1
LMSLive (Wizdom Systems Inc.)	3	600	200	300	0
Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	82	2,600,000	400,000	100,000	3
Moodle	Information not available. See Appendix P for detailed document on Moodle features	Information not available. See Appendix P for detailed document on Moodle features	Information not available. See Appendix P for detailed document on Moodle features	Information not available. See Appendix P for detailed document on Moodle features	0
Novations Ready Solutions LMS (Novations Learning Technologies)	11	750,000	500,000	13,000	1
OnTrack for Training Product Suite (DKSystems)	1,425	4,000,000	500,000	0	5
Syntrio Enterprise LMS (Syntrio)	98	250,000	N/A	40,000	3
Tracker.Net (Platte Canyon Multimedia Software Corp.)	The Company would not provide information	The Company would not provide information	The Company would not provide information	The Company would not provide information	0
Training Partner 2003 (GeoMetrix Data Systems Inc.)	450	3,500,000	1,500,000	1,500,000	4

System (company)	Number of organizations using this LMS	Total number of registered learners worldwide	Largest "behind-the-firewall" implementation to date (# of learners)	Largest "hosted" implementation to date	Rating
Virtual Training Assistant (RISC)	350	500,000	135,000	150,000	4
WebMentor LMS (Avilar Technologies Inc.)	160	270,000	150,000	39,000	3
Xtention Learning Management System (Xtention Inc.)	100	1,000,000	315,000	75,000	3

2.2. Customization

Rating criteria based on whether or not the system can be customized. No=0, Yes (1-5) depending on how customizable it is.

System (company)	Is the user interface customizable	Rating
Allen Learning Portal (Allen Communication Learning Services)	Information not available on web site; number listed is NIS	0
CESEI	Fully customizable with templates	5
DOTS - Dynamic Online Training System (WebRaven)	Customizable to create a custom look and feel. Done by the local administrator.	5
Evolution Learner Manager (ELM) (OutStart Inc.)	Customizable to create a custom look and feel. Done by the local administrator.	5
How to Master Learning Management System (InfoSource Inc.)	Customizable to a degree, such as banners, colours, basic look and feel.	1
IntraLearn XE (IntraLearn Software Corp.)	Customizable to create a custom look and feel. Done by the local administrator.	5
Intranet U Enterprise Learning Management System (Intranet U)	No information available	0
iPerform (Integrated Performance Systems)	Customizable to create a custom look and feel. Done by the local administrator.	5
LMSLive (Wizdom Systems Inc.)	Customizable to create a custom look and feel, but usually done by the company, not designed as such to be customized easily by the program administrator on set up and deployment	2
Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	Customizable to create a custom look and feel. Done by the local administrator or the company.	5
Moodle	software is open source	5
Novations Ready Solutions LMS (Novations Learning Technologies)	No information available at this time	0
OnTrack for Training Product Suite (DKSystems)	Called company - no information at this time	0

System (company)	Is the user interface customizable	Rating
Syntrio Enterprise LMS (Syntrio)	Customizable to create custom sort order for 6 fields as well as look and feel with client logo	2
Tracker.Net (Platte Canyon Multimedia Software Corp.)	Logo is customizable by local administrator. Look and feel are customizable through the primary mechanism of editing the cascading style sheet (CSS) or individual graphics. Source code is also available to purchase for \$4,995	2
Training Partner 2003 (GeoMetrix Data Systems Inc.)	Called company - no information at this time	0
Virtual Training Assistant (RISC)	Information not available at this time	0
WebMentor LMS (Avilar Technologies Inc.)	Customizable to create a custom look and feel. May be done by Avilar or local administrator.	5
Xtention Learning Management System (Xtention Inc.)	Fully customizable	5

2.3. Searchable Learning Object Repository

Rating criteria is based on if information was available or not. Note that not applicable = 0/5

System (company)	Does it have SLOR?	Is it an advanced system?	How comprehensive is the search?	Rating
Allen Learning Portal (Allen Communication Learning Services)	Information not available	Information not available	See Appendix A for available information on this product.	0
CESEI	No	n/a	n/a	0
DOTS - Dynamic Online Training System (WebRaven)	Information not available	Information not available	See Appendix B for available information on this product.	0
Evolution Learner Manager (ELM) (OutStart Inc.)	Information not available	Information not available	See Appendix C for available information on this product.	0
How to Master Learning Management System (InfoSource Inc.)	Information not available	Information not available	No information available	0
IntraLearn XE (IntraLearn Software Corp.)	Yes	See LMS Requirements Matrix Appendix A	See Appendix D for more information.	5
Intranet U Enterprise Learning Management System (Intranet U)	Information not available	Information not available	No information available	0

System (company)	Does it have SLOR?	Is it an advanced system?	How comprehensive is the search?	Rating
iPerform (Integrated Performance Systems)	Yes: Our Course Builder Tool and Resource Library can be used to create Learning Objects that are searchable.	This feature can be purchased as a separate module.	The searches can be done via key words or against a learning object profile.	4
LMSLive (Wizdom Systems Inc.)	Yes	Yes	Their program blends document management ability such as online repositories with courses and catalogue functionality	5
Moodle	Yes	Yes	Very comprehensive. They support external repositories. For example, Moodle can be easily integrated with HarvestRoad Hive. See Appendix H for more information on this product.	5
Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	Information not available	Information not available	No information available	0
Novations Ready Solutions LMS (Novations Learning Technologies)	Information not available	Information not available	No information available	0
OnTrack for Training Product Suite (DKSystems)	Information not available	Information not available	No information available	0
Syntrio Enterprise LMS (Syntrio)	Information not available	Information not available	No information available	0
Tracker.Net (Platte Canyon Multimedia Software Corp.)	No	N/A	N/A	0
Training Partner 2003 (GeoMetrix Data Systems Inc.)	Yes	Yes	Training Partner's LCMS piece supports searchable meta-tags. See Appendix E for available information on this product.	5
Virtual Training Assistant (RISC)	No information available	No information available	See Appendix F for available information on this product.	0

System (company)	Does it have SLOR?	Is it an advanced system?	How comprehensive is the search?	Rating
WebMentor LMS (Avilar Technologies Inc.)	Yes: Assuming question references SCORM Learning Objects Avilar provide a searchable learning object repository.	Yes: The searches provided by Hive are rated as the most comprehensive available	Very Comprehensive: On a broad scale Avilar has a relationship with a company called Harvest Road http://www.harvestroad.com/ HarvestRoad Hive® is a federated digital repository system that manages sharing and reuse of any form of content in any online learning environment across any number of locations or countries and integrates with any Learning Management or ERP System.	5
Xtention Learning Management System (Xtention Inc.)	Yes	Yes	Can search courses and catalogues. See Appendix G for more information on this product.	5

3 Student Access

3.1. LMS Standards and Compliance Information

Rating criteria based on compliance with AICC, SCORM and Section 508.

System (company)	AICC	SCORM	Section 508	Rating
Allen Learning Portal (Allen Communication Learning Services)	Compliant	NA; not conformant Specific levels of conformance achieved: Support for SCORM 1.2 data tracking.	No	0
CESEI	No	No	No	0
DOTS - Dynamic Online Training System (WebRaven)	Working toward compliance Q4 2004	Conformant - version 1.2	No. Successfully tested with Bobby	2
Evolution Learner Manager (ELM) (OutStart Inc.)	Working toward compliance Q3 2004	Conformant - version 1.2 Conformant - version 1.1 Specific levels of conformance achieved: LMS-RTE2	No	2

How to Master Learning Management System (InfoSource Inc.)	Compliant	Conformant - version 1.2 Specific levels of conformance achieved: The LMS can upload and track any SCORM - conformant material.	No	3
IntraLearn XE (IntraLearn Software Corp.)	Compliant	Conformant - version 1.2 Specific levels of conformance achieved: IntraLearn measures compliance by a 100 percent success level of compliant courseware running in a customer's IntraLearn implementation. Many major clients including several US government agencies, are running SCORM 1.2 content smoothly in IntraLearn. The company is driving towards SCORM 2004 compliance, with several key partners that will need full compatibility when it has been achieved by the specification.	Yes. Successfully tested with JAWS reader and Bobby	4
Intranet U Enterprise Learning Management System (Intranet U)	Compliant	Conformant - version 1.2 Specific levels of conformance achieved: LMS-RTE1	No	3
iPerform (Integrated Performance Systems)	Compliant	Conformant - SCORM 2004 Conformant - version 1.2	Yes	5
LMSLive (Wizdom Systems Inc.)	Compliant	NA; not conformant	Yes. Successfully tested with JAWS reader and Bobby	2

Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	Compliant	Conformant - version 1.2 Conformant - version 1.1 Specific levels of conformance achieved: RET LEVEL 3, SCORM 2004 conformance is planned for the July 2004 release of the Knowledge Centre	Yes. Successfully tested with JAWS reader, Bobby, IBM Home Reader V 3.0, Page Screamer	5
Moodle	Compliant	Conformant - Version 1.2	Information not available. See Appendix P for detailed document on Moodle features	4
Novations Ready Solutions LMS (Novations Learning Technologies)	Working toward compliance Q2 2005	Conformant - version 1.2 Conformant - version 1.1 Conformant - version 1.0	No	2
OnTrack for Training Product Suite (DKSystems)	Compliant	Conformant - version 1.2	Yes. Successfully tested with JAWS reader	5
Syntrio Enterprise LMS (Syntrio)	Working toward compliance Q1 2005	NA; not conformant	No	1
Tracker.Net (Platte Canyon Multimedia Software Corp.)	NA; not compliant	Conformant - version 1.2 Specific levels of conformance achieved: Tracker.Net is conformant to the SCORM 1.2 runtime environment. It does not use SCORM manifest files, and therefore is not conformant to SCORM manifest specifications.	Yes. Compliance comes from being built on top of ASP.NET.	3

Training Partner 2003 (GeoMetrix Data Systems Inc.)	Compliant	Conformant - version 1.2	Yes. Successfully tested with JAWS reader and	5
		Conformant - Version 1.1	Bobby. Training Partner 2000 tested successfully for Section 508 compliance. The new features in Training Partner 2003 are being tested, and the company expects to ensure compliance on all areas by Sumer 2004.	
Virtual Training Assistant (RISC)	Compliant	NA; not conformant	No	0
WebMentor LMS (Avilar Technologies Inc.)	Compliant	Certified Conformant - version 1.2 Conformant - version 1.1 Conformant - version 1.0 Specific levels of conformance achieved: LMS-RTE3. WebMentor LMS was the first SCORM version 1.2 certified LMS by ADL.	No	3
Xtention Learning Management System (Xtention Inc.)	NA; not compliant	Conformant - version 1.2 Specific levels of conformance achieved: RTE2, plus cmi.interactions	Yes, on the user side of the LMS. Successfully tested with Bobby.	3

3.2. User Information

Rating criteria based on percentage of “Corporate university / Learning portal” both behind firewall and hosted as well as medium-sized implementations (2,000 – 5,000 learners). These three values were added together to rate the LMS User information from the perspective of this study.

Rating
0% – 17% = 0
18% – 24% = 1
25% - 51% = 2
52% – 68% = 3
69% - 85% = 4
86% - 100% = 5

No large-sized implementations data available.

System (company)	Primary Use Types	Use	Rating
Allen Learning Portal (Allen Communication Learning Services)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	0%	2
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	25%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	0%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	0%	
	Medium-sized implementations (2,000-5,000 learners)	25%	
	Small implementations (under 2,000 learners)	50%	
	Other	0%	
CESEI	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	0%	1
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	0%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	0%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	0%	
	Medium-sized implementations (2,000-5,000 learners)	15%	
	Small implementations (under 2,000 learners)	75%	
	Other: Private companies, non-profit organizations, primary schools, independent teachers, homeschooling parents	10%	
DOTS - Dynamic Online Training System (WebRaven)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	7%	0
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	2%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	12%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	5%	
	Medium-sized implementations (2,000-5,000 learners)	5%	
	Small implementations (under 2,000 learners)	68%	
	Other	0%	
Evolution Learner Manager (ELM) (OutStart Inc.)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	20%	3

	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	0%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	5%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	0%	
	Medium-sized implementations (2,000-5,000 learners)	35%	
	Small implementations (under 2,000 learners)	40%	
	Other	0%	
How to Master Learning Management System (InfoSource Inc.)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	30%	3
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	5%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	0%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	40%	
	Medium-sized implementations (2,000-5,000 learners)	20%	
	Small implementations (under 2,000 learners)	32%	
	Other	0%	
IntraLearn XE (IntraLearn Software Corp.)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	13%	2
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	7%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	34%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	14%	
	Medium-sized implementations (2,000-5,000 learners)	23%	
	Small implementations (under 2,000 learners)	9%	
	Other	0%	
Intranet U Enterprise Learning Management System (Intranet U)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	35%	4
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	10%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	0%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	0%	
	Medium-sized implementations (2,000-5,000 learners)	35%	
	Small implementations (under 2,000 learners)	20%	
	Other	0%	
iPerform (Integrated Performance Systems)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	0%	3*
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	50%	

	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	25%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	10%	
	Medium-sized implementations (2,000-5,000 learners)	10%	
	Small implementations (under 2,000 learners)	5%	
	Other	0%	
LMSLive (Wizdom Systems Inc.)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	0%	0
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	0%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	0%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	0%	
	Medium-sized implementations (2,000-5,000 learners)	0%	
	Small implementations (under 2,000 learners)	100%	
	Other	0%	
Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	36%	3
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	18%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	1%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	1%	
	Medium-sized implementations (2,000-5,000 learners)	19%	
	Small implementations (under 2,000 learners)	25%	
	Other	0%	
Moodle (percentages not available, but general information on usage as follows)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	Yes	0
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	Yes	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	?	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	Yes	
	Medium-sized implementations (2,000-5,000 learners)	?	
	Other: Private companies, non-profit organizations, primary schools, independent teachers, homeschooling parents	Yes	
Novations Ready Solutions LMS (Novations Learning Technologies)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	30%	5
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	50%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	10%	

	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	0%	
	Medium-sized implementations (2,000-5,000 learners)	10%	
	Small implementations (under 2,000 learners)	0%	
	Other	0%	
OnTrack for Training Product Suite (DKSystems)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	41%	5*
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	0%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	0%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	1%	
	Medium-sized implementations (2,000-5,000 learners)	57%	
	Small implementations (under 2,000 learners)	1%	
	Other	0%	
Syntrio Enterprise LMS (Syntrio)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	0%	2
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	22%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	0%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	0%	
	Medium-sized implementations (2,000-5,000 learners)	25%	
	Small implementations (under 2,000 learners)	53%	
	Other	0%	
Tracker.Net (Platte Canyon Multimedia Software Corp.)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	10%	3
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	0%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	20%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	5%	
	Medium-sized implementations (2,000-5,000 learners)	45%	
	Small implementations (under 2,000 learners)	20%	
	Other	0%	
Training Partner 2003 (GeoMetrix Data Systems Inc.)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	23%	4
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	5%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	5%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	3%	
	Medium-sized implementations (2,000-5,000 learners)	48%	

	Small implementations (under 2,000 learners)	16%	
	Other	0%	
Virtual Training Assistant (RISC)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	30%	4
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	30%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	0%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	0%	
	Medium-sized implementations (2,000-5,000 learners)	20%	
	Small implementations (under 2,000 learners)	20%	
	Other	0%	
WebMentor LMS (Avilar Technologies Inc.)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	5%	1
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	0%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	40%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	5%	
	Medium-sized implementations (2,000-5,000 learners)	20%	
	Small implementations (under 2,000 learners)	30%	
	Other	0%	
Xtention Learning Management System (Xtention Inc.)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	20%	2
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	15%	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	15%	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	10%	
	Medium-sized implementations (2,000-5,000 learners)	20%	
	Small implementations (under 2,000 learners)	15%	
	Other	0%	
Moodle (percentages not available, but general information on usage as follows)	Corporate university/learning portal: Behind-the firewall, large-scale implementation (5,000+ learners)	Yes	0
	Corporate university/learning portal: Hosted (by you or your hosting partner), large-scale implementation	Yes	
	Commercial learning portal (this includes content providers who resell their content and provide the LMS as a third-party offering to clients)	?	
	Academic online infrastructure (primarily used by higher education, secondary education, or K-12 organizations)	Yes	
	Medium-sized implementations (2,000-5,000 learners)	?	
	Small implementations (under 2,000 learners)	Yes	
	Other: Private companies, non-profit organizations, primary schools, independent teachers, homeschooling parents	Yes	

4 HSPNet Integration

4.1. Third Party Interoperability and Integration

Note: Rating criteria is based on multi-byte, multi language, large 3rd party support = 5

System (company)	Multi-byte support (to support complex fonts and characters sets for languages such as Chinese and Korean)	Learner interface available in multiple languages	Interoperability with third-party, off-the-shelf e-learning content	Rating
Allen Learning Portal (Allen Communication Learning Services)	Automatic	English (US)	NETg	1
CESEI	Automatic	English	None	1
DOTS - Dynamic Online Training System (WebRaven)	Automatic	English (US) English (UK)	ANTA (Australian National Authority Training) Blake Dawson Waldron CCH Crisp Publications Cyber Institute (Australian Institute of Management) Element K NETg Online Learning Australia SkillSoft	2
Evolution Learner Manager (ELM) (OutStart Inc.)	Not a current feature	English (US) Spanish	NETg SkillSoft	2
How to Master Learning Management System (InfoSource Inc.)	Not a current feature	English (US)	McGraw-Hill NIIT QuicKnowledge	2
IntraLearn XE (IntraLearn Software Corp.)	Semi-automatic	English (US) Chinese (Simplified) Dutch French French (Canadian) German Greek Hungarian Icelandic Italian Lithuanian Latvian	Advanced Systems Technology Allen Interactions AST Corp Element K Harvard Business School Publishing HC Pro ITC Learning McGraw-Hill Microsoft MindLeaders NETg PrimeLearning	5

System (company)	Multi-byte support (to support complex fonts and characters sets for languages such as Chinese and Korean)	Learner interface available in multiple languages	Interoperability with third-party, off-the-shelf e-learning content	Rating
		Polish Portuguese (Brazilian) Portuguese (European) Russian Spanish Spanish (Latin America)	PureSafety Quick Compliance Serebra SkillSoft SmartForce Vivid Learning Systems WeComply	
Intranet U Enterprise Learning Management System (Intranet U)	Not a current feature	English (US)	Allen Interactions Coastal/Clarity Easyi Element K Global Knowledge Harvard Business School Publishing InterLearn 3 KnowledgeNet LeadingWay LearnSomething LogicBay Maximize Learning Microsoft MindLeaders NETg Ninth House Provant SkillSoft University of HealthCare	3
iPerform (Integrated Performance Systems)	Automatic	English (US) Spanish French German Italian	Achieve Global Coastal/Clarity Crisp Publications DLC Solutions Element K MindLeaders NETg SkillSoft	5
LMSLive (Wizdom Systems Inc.)	Semi-custom	English (US)	NETg	1
Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	Custom	English (US)	Element K Learnware Microsoft MindLeaders NETg Ninth House	3

System (company)	Multi-byte support (to support complex fonts and characters sets for languages such as Chinese and Korean)	Learner interface available in multiple languages	Interoperability with third-party, off-the-shelf e-learning content	Rating
			Playback Media QuicKnowledge SkillSoft SmartForce	
Moodle	Plug-in language packs to allow full localisation to any language. Currently there are lanuage packs in 68 different languages. See appendix B for list of languages currently available.	English (US) French German Spanish Portuguese Other?	See Appendix I for more information on this product.	5
Novations Ready Solutions LMS (Novations Learning Technologies)	Automatic	English (US)	Books 24x7 Motorola 6-Sigma NETg Novations Group Quick Compliance SkillSoft	3
OnTrack for Training Product Suite (DKSystems)	Automatic	English (US)	1-Minute Learning Achieve Global Allen Communication ContentAlive EDT Learning Eduneering Handshaw Interskill McGraw-Hill Media 1 MindLeaders MyDas Inc. Navowave NETg PeopleSoft Primedia RuMe SkillSoft Syberworks Syntrio Think -IM Training Online Trivantis Web Courseworks WebLearning.com WeComply Xebec ZooLogic	3
Syntrio Enterprise LMS	Not a current feature	English (US)	Achieve Global	3

System (company)	Multi-byte support (to support complex fonts and characters sets for languages such as Chinese and Korean)	Learner interface available in multiple languages	Interoperability with third-party, off-the-shelf e-learning content	Rating
(Syntrio)			Athena Online BISYS Education Comply Site Knowledge Impact NETg NICTA Richardson SkillSoft SmartForce Syntrio	
Tracker.Net (Platte Canyon Multimedia Software Corp.)	Semi-automatic	English (US)	None.	0
Training Partner 2003 (GeoMetrix Data Systems Inc.)	Not a current feature	English (US) Spanish French (Canadian) German Italian Swedish Portuguese (Brazilian)	Element K InfoSource MindLeaders NETg Questionmark SkillSoft Training Online Trivantis	5
Virtual Training Assistant (RISC)	Automatic	English (US)	Banker's Training Coastal/Clarity Consolidate Digital Publishing CoreMedia Corpedia DDI Eduneering Knowledge Quest LRN (The Legal Knowledge Company) MindLeaders NETg Praxis PureSafety Resource Development Group Richardson SkillSoft TutorPro	3
WebMentor LMS (Avilar Technologies Inc.)	Not a current feature	English (US) Spanish	MindLeaders NETg SkillSoft	4

System (company)	Multi-byte support (to support complex fonts and characters sets for languages such as Chinese and Korean)	Learner interface available in multiple languages	Interoperability with third-party, off-the-shelf e-learning content	Rating
			Training Online	
Xtention Learning Management System (Xtention Inc.)	Custom	English (US)	Element K Integrated Performance Support KT Solutions Paradigm Learning TE2 1 Vivid Learning Systems	3

4.2. Third-Party API Capability

Rating criteria based on API support, number of available functions and what features the API supports

System (company)	Does it have API functionality?	# of Functions	What features does it allow?	Rating
Allen Learning Portal (Allen Communication Learning Services)	No Information available	No Information available	No Information available	0
CESEI	No	N/A	Complete .NET source code is available for an additional cost	5
DOTS - Dynamic Online Training System (WebRaven)	No Information available	No Information available	No Information available	0
Evolution Learner Manager (ELM) (OutStart Inc.)	No Information available	No Information available	No Information available	0
How to Master Learning Management System (InfoSource Inc.)	No Information available	No Information available	No Information available	0
IntraLearn XE (IntraLearn Software Corp.)	Yes	See LMS Requirements Matrix Appendix D	See LMS Requirements Matrix Appendix D	4
Intranet U Enterprise Learning Management System (Intranet U)	Information not available	Information not available	Information not available	0
iPerform (Integrated Performance Systems)	Yes	Various; including SCORM; AICC; NETg and others	In addition, they do have APIs that allow companies to update employee profile information, manage user groups (a security function), register people for courses, cancel people from courses, etc.	4

System (company)	Does it have API functionality?	# of Functions	What features does it allow?	Rating
LMSLive (Wizdom Systems Inc.)	Yes	Many	AICC Compliant; able to find information from different data points and build custom reports	3
Meridian KSI Knowledge Centre (Meridian Knowledge Solutions Inc.)	Information not available	Information not available	Information not available	0
Moodle	Yes	Hundreds	Various	5
Novations Ready Solutions LMS (Novations Learning Technologies)	Information not available	Information not available	Information not available	0
OnTrack for Training Product Suite (DKSystems)	Information not available	Information not available	Information not available	0
Syntrio Enterprise LMS (Syntrio)	Information not available	Information not available	Information not available	0
Tracker.Net (Platte Canyon Multimedia Software Corp.)	No	N/A	complete source code is available for an additional \$4995USD	3
Training Partner 2003 (GeoMetrix Data Systems Inc.)	Yes	140 unique; 100's of event notifications	VBA support as well as web design tool to allow complete customization of LMS environment; Programmers use this feature to customize the application	5
Virtual Training Assistant (RISC)	No information available	No information available	No information available	0
WebMentor LMS (Avilar Technologies Inc.)	Yes: They provide web services that allow certain actions (enroll/remove students, register/deregister/get grades for students) and a few others. In addition, they have the configurable menu system and user interface.	Currently 5: More features are in the process of being added.	Here are the special features, the ones with "*" are in development and targeted for completion by the end October, 2005. a) Add Student/Remove Student b) *Add Instructor/Remove Instructor c) *Add Administrator/Remove Administrator d) Register Student/Deregister Student/Get Current Grade e) *Get Organization Catalog	5
Xtention Learning Management System (Xtention Inc.)	No set API's but business logic is open	See Appendix G	See Appendix G	1

Appendix B - Allen Learning Portal

1 Description of Features and Benefits

1.1. Introduction

Allen Communication Learning Services works with many different customers with a variety of e-learning needs. Many of these customers need a way to track the performance of online learners, but they don't want to spend hundreds of thousands of dollars on an overly complex learning management system (LMS).

The **Allen Learning Portal** overcomes this issue with a simple and cost-effective solution. The Allen Learning Portal currently provides the basic functionality needed to manage, launch, and track online students. The Allen Learning Portal was designed with an open architecture to allow features to be added as the need arises.

This document explains the features, benefits, and technical specifications of the Allen Learning Portal.

1.2. Learning Portal Features

The Allen Learning Portal welcomes students to a central location for all their online training. The features of the learning portal include:

- A simple and intuitive navigation scheme
- A catalog of available courses and curriculum for the current student and/or group
- A list of currently assigned and completed courses. This course list is personalized for each student.
- Self registration capabilities
- Space for training news or other helpful messages from the portal administrator
- Customizable links to an online help file, library information, external websites, and helpful contact information

1.3. Administrator Features

The Allen Learning Portal allows administrators to manage students, training groups, and curriculums. Administrators have the ability to:

- Add, delete, or update students
- Assign students to training groups
- Assign access privileges to students, supervisors, and administrators
- Add, delete, or update courses
- Add, delete, or update training groups
- Add, delete, or update curriculums (a series of courses)
- Assign supervisors and curriculums to training groups
- View reports on students, courses, and training groups

1.4. Managing Users

User is a generic term that applies to all individual users of the Allen Learning Portal. Administrators assign a unique identifier to each user, such as a social security number or an employee ID. Each user is assigned to a training group. Each training group has a supervisor and an assigned curriculum.

Each user is granted access privileges at one of three levels:

- Student – Students can only access the student portal. Students do not have access to the administration portal.
- Group Supervisor – Supervisors are responsible for a training group. Supervisors have access to the administration module, but only to view reports for their training group and its users. Supervisors can assemble and assign courses and curriculum for the groups and users that they supervise.
- Administrator – Administrators have access to forms and reports for all training groups and all users.
- Administrators can add, delete, or update courses, course types, course status, student status, and access levels.

1.5. Reports

Information about students, student results, courses, and training groups are available in standard reports. The components of each report include:

- Students Report – student name, assigned user level (student, supervisor, or administrator), and status (active, inactive, deleted)
- Student Results Report – student name, course name, score, completion status
- Courses Report – course name, course description
- Training Groups Report – group name, assigned curriculum

1.6. Technical Specifications

The Allen Learning Portal uses an open source operating system, web server, server side scripting language, and database management system to give our customers the features and benefits that they need to jump start their e-learning efforts for a reasonable price.

Allen has tested and used the Allen Learning Portal on a server with the following specifications:

Operating System:	Red Hat Linux Version 7.3
RAM:	256 MB
CPU:	Intel Pentium II
Hard Drive Space:	The portal takes less than 1 MB of disk space. Training courses require additional disk space.
Web Server:	Apache Version 1.3.20
DBMS:	MySQL version 3.23.49a
Server-side scripting:	PHP version 4.0.6
Supported Browsers¹:	Microsoft Internet Explorer version 5.5 and higher Netscape 7.0 and higher
Security:	The portal architecture is a secure web-based application using standard server-side scripting and database technologies providing back end security and data protection. ACLs can customize the login security to use any form of data (e.g. employee numbers, SSN, name & password) depending on the your needs. We can also customize the login to accept silent connections coming from another portal or

	website to allow even greater integration with existing secure web applications.
--	--

Moving to other versions of the systems mentioned above might require minor modifications to the portal code because scripting languages evolve and certain features are deprecated or dropped.

The client platform specifications must meet the requirements for the web browser and controls used within the browser to display media elements such as Macromedia Flash components or Microsoft Windows Media elements.

1 The Allen Learning Portal requires the use of iFrames which we have tested in IE 5.5 and higher, or Netscape 7.0 and higher. Please note that we have not tested the portal in all possible Netscape platforms. We do not guarantee that the portal will work on a Macintosh or Linux client (browser).

Appendix C - DOTS Dynamic Online Training System

1 User Interface

DOTS interface is fully customizable and each of their clients has captured their own unique brand and image in DOTS. DOTS actually allows the administrator to do the customization themselves, although DOTS staff usually does the initial set-up.

DOTS is structured to allow multiple organizations (departments, offices, subsidiaries etc.) and each can have a unique interface.

Appendix D - Evolution Learner Manager

1 Features and Capabilities

1.1. *User Interface*

The user interface is customizable by the program administrators to provide a custom look and feel.

1.2. *Administration Capabilities*

- Manages all administration for learning and training processes
- Focuses on the learner
- Integration with OutStart's product family
- Provides complete learning content and administration applications for large and small companies and any size team

1.3. *Complete Learning and Training*

OutStart Evolution LMS is a complete learning management system (LMS) that manages all of the administration that surrounds learning and training processes. OutStart Evolution LMS quickly and easily connects learners to just the right content to accelerate readiness and increase their overall performance. Unlike other LMSs, OutStart Evolution LMS requires no special skills for learners or administrators, and installation does not require expensive services engagements. Defaults and base configurations let organizations start using it immediately out of the box.

OutStart Evolution LMS is an integrated part of the Evolution Intelligent Learning Application, and an optional module that can be integrated with any product in the OutStart product family. This flexibility meets the complete learning management and learning content needs of large and small organizations, and any size team.

OutStart Evolution LMS is a complete, scalable LMS for online, offline, and classroom learning. Key OutStart Evolution LMS features and capabilities include:

1.4. *Course, Catalog, and Curriculum Administration*

- Launch and track content and courses including
- Third-party packaged courses
- Default administrative options
- Definable catalogs offer varied course grouping
- Public and private catalogs
- Definable curriculum; public and private Resource Management
- Complete online, offline, and classroom scheduling and management
- Ability to define, manage, and track any type of resource, e.g. classrooms, computers, instructors, etc.
- Manage such learning tools as CBTs, downloads, reference materials, and more

1.5. *Learner Management and Measurement*

- Default learner options
- Learner controlled look and feel, navigation, and registration

- Reporting on all activities in the system from over 20 pre-built reports and unlimited custom reporting available through Crystal reports
- Flexible report scheduling and delivery Education Plans, Gap Analysis, and Skills Mapping
- Define any collection of course and curricula with required and optional elements
- Managers can define learner specific plans and/or job role plans and track progress of learners against plans
- Define proficiency profiles and ratings and map skills against profile Standards
- SCORM, AICC, 508 Compliance
- US FDA 21 CFR Part 11
- OSHA

The faster learners find the specific content they need, the faster they apply it to impact performance. OutStart Evolution LMS connects learners to the right content more quickly than other offerings:

- Requires fewer clicks to access the system, launch a course, or search for the right courses or content.
- Defaults allow learners to access the system without administrative intervention.
- Learners can control their learning environment to make it optimal for themselves:
- Learners have control over look and feel, navigation, and registration, to manage activities to suit their personal needs and styles.
- Learners have a personal OutStart Evolution LMS dashboard to track and refine their own learning experiences.
- OutStart Evolution LMS makes it easier to find needed content than other offerings:
- Integration with OutStart's product family enables the learner to search and find content at more granular levels than a whole course.
- Learners can get highly relevant information instead of wading through whole courses to find 2 or 3 critical paragraphs.
- Instead of just keyword searches, OutStart Evolution LMS makes content searchable by keywords, job roles, and even subject matter.

As a result, time spent learning is more productive, and dropout rates are lower because learners only spend time reviewing or studying new things. OutStart Evolution LMS complete support for tracking and measurement of online and offline learning, means learners can learn anywhere, anytime without compromising tracking and measurement.

1.6. Integration Improve ROI

Unlike other LMSs, OutStart Evolution LMS installs in hours – not weeks, or months, and does not require costly services engagements. Defaults for administrators and learners expedite implementation. Learner self-service capabilities minimize administration tasks, so resources that had been dedicated to learning and training administration can be focused on other areas of the business. While learner management is crucial, providing great content to learners is equally important.

OutStart's integrated product family provides cost effective access to both a fully functional LMS and a choice of best of breed learning content creation and management products, that meet the needs of large and small companies and any size team.

1.7. Cost Effectiveness and Seamless

OutStart Evolution LMS is priced to make the decision easy, and is designed so that its 3-year cost of ownership is roughly 50% of the typical LMS implementation.

1.8. Accelerates Learning Impact

OutStart Evolution LMS supports multiple types of learning by delivering content the way each learner needs to experience it , whether it is by e-learning, in a classroom, through Word documents, or on a PDA. In addition to more powerful searching, OutStart Evolution LMS makes it easy for learners and managers to ensure and certify competency through “proficiency pathing.” This takes learners down learning paths that build specific skills and competencies.

Finally, because OutStart Evolution LMS tightly integrates with Evolution’s robust learning content management capabilities, it fully supports personalized, prescriptive, and adaptive learning.

Appendix E - Intralearn XE

1 Application Extension Pack

1.1. What is the Application Extension Pack?

The IntraLearn Application Extension Pack (AEP) is a set of code modules, editable files, documents, and techniques that licensed users can employ to extend the functionality and capabilities of their IntraLearn implementation. Included in the AEP are 15 separate and independent elements. To implement any of these elements, basic HTML, SQL scripting, Cold Fusion or web services knowledge may be required. In addition, technical knowledge of the IntraLearn Web directory and the IntraLearn Database, along with any other database(s) you will use, in order to properly install these elements. IntraLearn Customer Support will only provide assistance with the specific IntraLearn code in the installation process.

1.2. What are the elements of the Application Extension Pack?

1.2.1 Auto assign students to hierarchy level

A trigger that automatically places students into a specific hierarchy level when they are added to the system via the Registration process. If you would like to have every student enrolled to be placed in a particular level of the hierarchy, you will hard code the hierarchy level value into the trigger. You can generate the hierarchy level value using the information from the database tables for each level (cyb_organization_level_1_mast, level_2_mast, etc.) or by invoking the Hierarchy_View1 web method of the web services API. Knowledge of SQL scripting and Web services are required to implement this component.

1.2.2 Auto course launch

Auto-launch your own course from within an IntraLearn authored course page. This component will allow you to dynamically access user and course session parameters and pass them to your course. This function is course-specific; therefore, each course that will be launched in this manner will require the set-up of the 2 files contained in this component. Knowledge of JavaScript and Cold Fusion is required to implement this component.

1.2.3 Auto e-mailer (custom routine for mass notification)

On-demand mass email notification. This function is for use by IntraLearn installations where students are enrolled manually by a Registrar or Administrator, either individually or bulk loaded. A temporary table is created and populated as each new student is registered. At a given time, determined by the administrator, an e-mail is sent to all new students in this temporary table informing them of their enrollment in a course(s). This is invoked from the left-side navigation frame via a custom link. This can be customized to send e-mails based on other events

such as: new course registrations, course completions, etc. Knowledge of HTML and SQL scripting is required to implement this component.

1.2.4 Automatic e-mail notification

Triggers that can be modified to send an e-mail informing the recipient of certain events: student enrolment in IntraLearn, registration in courses, impending course expiration, or customized for other events such as notifying an administrator of a student failing a course. Knowledge of SQL scripting is required to implement this component.

1.2.5 Auto Status Update AICC

automatically mark course registrations as “Complete” based on a student achieving a minimum score on any assessment within an AU. Knowledge of SQL scripting is required to implement this component.

1.2.6 Bundle Trigger

A trigger that automatically enrolls students to a group of courses based on the student registering to a single course. Knowledge of SQL scripting is required to implement this component.

1.2.7 7. Custom Course Grouping

A trigger that auto enrolls each student in the enrollment.xls bulk load spread sheet without individually specifying a course for each student in the spreadsheet. Knowledge of SQL scripting is required to implement this component.

1.2.8 Application Extension Pack / Page 2

276 West Main Street Northboro, MA 01532 S-173-05-050708
Tel: 508-393-2277 Fax: 508-393-6841 sales@intralearn.com www.intralearn.com

1.2.9 Enrolment Bulk Load Enhancement

Using IntraLearn’s standard enrollment.xls bulk load spreadsheet, add, modify and delete student profile accounts. Also, add or delete student log-on accounts and receive notification of any user name duplications from this and all other ports. No special programming skills needed to implement this component.

1.2.10 Footer

A means to display consistent messaging such as copyright notices at the bottom of every page in IntraLearn by modifying one HTML page. Knowledge of HTML is required to implement this component.

1.2.11 Hierarchy Course Assignments

IntraLearn customers can now assign one or more courses to a hierarchy level. They would create a custom link in the manager, registrar, or instructor navigation frame to point to

/reports/courseassignments.cfm. An "Assign Course" image is provided. Upon clicking the link, they are presented with the hierarchy view where they will click on a level. The user would then be prompted to select the course and click Submit. All students in that hierarchy level will now be registered to the chosen course. Repeat for as many courses as necessary. Can be applied on a port-by-port basis.

1.2.12 Job Course Grouping

trigger that enrolls students in courses based on their Job Title. Knowledge of SQL scripting is required to implement this component.

1.2.13 Migrating course(s) between ports

a stored procedure that allows you to move a course from one organization to another for LSP and XE installations. Knowledge of SQL scripting is required.

1.2.14 Miscellaneous triggers and procedures

An assortment of procedures to accommodate your organization's various business needs, including: automatic student course expiration, e-mail notifications to a student's manager and automatic student course registration based on completing one or more prerequisites. While these procedures can be used "as-is," you are free to customize them where necessary to address specific needs within your organization.

1.2.15 SCORM API (non-Java)

a replacement for the default SCORM viewer that does not require a Java plugin. This method utilizes a web service accessible via HTTP calls as opposed to the Java-driven remote scripting capability. No special programming skills needed to implement this component.

1.2.16 Web Parts

Integrate Microsoft's SharePoint application with IntraLearn through the use of four web parts. These web parts give the your organization's SharePoint administrator the ability to incorporate the following functions directly inside a SharePoint web site:

- My Learning - allow learners to access their assigned courses.
- Grade Book Summary - allow learners to access a summary of their current course grades.
- Grade Book Detail - provides users with instructor permission read-only access to the students' grades, averages for all courses assigned to that instructor.
- Reports - provides users with registrar permission access to the standard reports module. These web parts can be used for both Windows SharePoint Services and SharePoint Portal Server implementations.

1.2.17 Web Services API

IntraLearn's newly expanded web service, which contains over 30 methods and is based on the .NET Framework, allow you to remotely add, edit and view course and user data in the IntraLearn database. By remotely accessing the IntraLearn data, you can build dynamically-

driven, custom e-learning web pages within your own application. Primary uses of the following methods include: the ability add and update user profiles, create one or more log-on accounts for a user, update course status information, and provide read-only access to various user data. Knowledge of web services is required to implement this component.

1.2.18 Web Services – Course Status Report

A Web services report that displays all students' status for a port between two dates. Knowledge of web services is required to implement this component.

1.3. *What skills are required to use the Application Extension Pack?*

Old Version: Skills needed to implement extensions to the IntraLearn application through the AEP include: general HTML knowledge, ColdFusion scripting, SQL scripting (Transact-SQL) and .NET programming for web services for the various components of the AEP. Each component of the AEP may require only one of the above skillsets or multiple skills.

New Version: To implement any of these elements, basic HTML, SQL scripting, Cold Fusion or web services knowledge may be required. In addition, technical knowledge of the IntraLearn Web directory and the IntraLearn Database, along with any other database(s) you will use, in order to properly install these elements. IntraLearn Customer Support will only provide assistance with the specific IntraLearn code in the installation process.

1.4. *How is the Application Extension Pack installed and accessed?*

Different elements of the AEP are deployed in varying ways. In some cases, it's a simple matter of

copying a file onto the Web server. In other cases, you are required to edit existing text files.

1.5. *What is the cost of the Application Extension Pack?*

The Application Extension Pack is available now and has a dual developer/runtime pricing structure as depicted below. Contact an IntraLearn Sales Representative for current pricing.

NET web services, Application Programming Interface (API), limited source code rights, schema, utilities and additional documentation. License to use AEP to develop extensions and deploy on developer's server.

- IntraLearn partners can qualify to receive an AEP license for development and demo purposes only.
- Priced with a one-time license fee plus an annual maintenance fee.
- Runtime License
- Runtime only license to deploy AEP-created extensions on end user's server.
- AEP Runtime License can only be sold by IntraLearn Partners.
- Priced with a one-time license fee per deployment* or with user-based royalty payments.

- *A deployment is intended to capture each server and each port on which each application developed utilizing AEP is made available for use.

1.6. How can I learn more about the Application Extension Pack and order it?

Contact Sales at (508) 393-2277 or sales@intralearn.com to learn more about ordering the Application Extension Pack.

Appendix F - Training Partner

1 Learning Content Management

A built-in Learning Content Management System has been added to Training Partner to let customers store, reuse and manage digital learning objects to create and deliver individualized learning experiences.

The new LCMS functions in Training Partner lets you:

- Set up learning objects for external content such as HTML, XML, PowerPoint and Excel from any web server
- Import AICC, SCORM or IMS objects from data sources or use internal content, built-in exams, objectives or evaluations
- Maintain individual learning objects (globally available class evaluations, objectives, skill exams) in a repository or make copies of objects
- Copy learning objects to individual courses or take a group of learning objects and publish them as a new course offering

Learning objects and courses now include searchable meta-tags, which are held in a global list to prevent duplication.

Meta-tags can be assigned to learning objects or courses. Courses automatically inherit meta-tags from their learning objects with the option of adding or removing tags from individual courses. You can search for courses in both the administrative and online modules of Training Partner using meta-tag searches.

Training Partner Online supports SCORM (www.adlnet.org) and AICC-B (API-based) courseware and is compliant with SCORM v1.1 and v1.2 standards with full support for all optional features.

Through the management and reuse of learning objects, an LCMS delivers targeted learning and increases organizational productivity providing what is needed, when it is needed and how it is needed.

The Training Partner LCMS allows organizations to leverage learning objects to educate different learner communities. Training Partner has followed the LCMS evolution and now offers mature content management that recognizes the complex real-world demands of enterprise learning.

For more information on Training Partner, please contact your Training Partner sales representative by e-mailing sales@trainingpartner.com or calling 1-800-616-5409.

2 Online Designer

2.1. Introduction

GeoMetrix is proud to offer a revolutionary Online Designer in its Training Partner Learning Management System. This next-generation HTML tool lets clients completely customize their learning environment. The Online Designer was used exclusively to rewrite the new Training Partner 2003 Online interface from the ground-up in an astonishing eight-week period. The secret to this tool's success is a customizable library of web-based components that provide virtually limitless extensibility for the Training Partner learning management system. The Online Designer simplifies the creation of HTML using a paradigm that lets non-programmers create and modify web pages without the need to understand complex HTML commands or programming languages (such as .ASP or Java).

This powerful, yet easy-to-use designer offers the ability to:

- Change the look-and-feel of web pages including colors, fonts and graphics
- Alter information to be displayed such as adding extra columns to a table, hiding fields, or change the order in which information is displayed
- Control access to pages and information for different user groups
- Create new web pages to provide additional functionality, display specific content
- Integrate with other systems, or provide alternate processes for existing functionality

2.2. Working in the Designer

The Online Designer window contains the Page Explorer, the Property Editor, the View area, the Component Palette and the Toolbar.

2.3. Page Explorer

The Page Explorer provides a view of all web pages and elements displayed in a tree view with pages as the top level. Once an element is selected you can perform various actions on it. You can add new elements to the current element or page by clicking on the appropriate element from the Component Palette. New pages are added by selecting one of the Page Elements on the standard Component tab.

2.4. Property Editor

The Property Editor displays and lets you edit the properties of the element selected. Elements have three properties groupings: user properties, system properties and events.

System properties are used to set up an element and define its purpose (i.e., it displays a text label, an image or an edit box). User properties are used to set the text of a label or which image file an image should display.

Events are called into the macroing language to allow for more complex logic.

2.5. View Area

The View area displays what the page will look like in the web browser. Links, images, forms, etc., are all displayed, as they would appear to the end-user.

The view area supports live navigation so you can click on hyperlinks, use buttons, enter form information and jump to other pages. You can also view the HTML source generated by the Designer.

2.6. Page Context

Most online pages display differently based on the user who has logged on, and/or that user's role, portal and language. In addition, many online pages require information to be passed describing what they need to display. For example, the "Public Course" page assumes it is looking at a specific course. During the normal navigation process users specify this information when they log on and navigate from page to page. However, this information may not be present or accurate within the Designer, and you may have to specify it manually. This information is known as the Page Context.

2.7. Live Navigation

The view area supports live navigation of pages. You can click on hyperlinks, use buttons, enter form information and jump to other pages.

Live navigation can be useful, but you must use some care considering the effects that clicking on a link or button might have.

Certain JavaScript and windowing features may not be available within the view area. For example, JavaScript that closes the current window will not function (and may generate errors) if executed within the Designer.

2.8. Component Palette

Components are arranged into different groups in the palette based on their purpose and include:

- Standard elements such as pages and links
- Non-visual elements that perform actions
- Database components for working with data
- Lists
- Tables
- Display components including headers, labels and hyperlinks
- Flow components that provide control logic
- Forms that allow users to enter information
- Picker controls for pop-up selection windows

Remote components for retrieving information from a remote site Toolbar. The top row of the Toolbar contains the system options for the Designer. The second Toolbar row has buttons that apply to the current element. Many of the element commands are also available on the pop-up menu for an element (accessed by right-clicking on the element in the Page Explorer).

2.9. Components

- The Online Designer lets you create and modify your own components and includes over seventy built-in components.
- The Tree Display component provides a simple tree-view of data.
- The *Tree Table* component provides a hierarchical tree view of data and allows viewing of multiple-columns of information from the tree.
- The *Include Report* component is used to show the output of a Quick Report on a page.
- The Information Panel is used to display information in name.
- The *Calendar* component provides a built-in control that displays a one-month calendar with events from the database shown as bars across the days.
- The *Course Picker* and *Program Picker* components let the user select a course or program from the system in a pop-up window.
- The *Date Picker Button* provides both the edit control and image button.

2.10. Updates and Page Statuses

One of the most powerful features of the Online Designer is how it handles updates of pages. In most systems, if you customize pages, you either prevent the system from updating the pages or the system overwrites your changes with its own, forcing you to redo any of your customization each and every time you perform an update, or effectively making it impossible to upgrade the system. Training Partner's processes ensure that updates can be applied with minimum effect, keeping the maintenance of custom changes at a manageable level. Elements with System Pages status appear in black. Elements with a User Page or Modified System Page status appear in blue. Elements with an Updated System Page status are red.

When Training Partner Online loads system pages, it performs special logic to ensure that user changes are maintained. And the red page status indicates to the user which pages should be examined to ensure that they work correctly.

2.11. Conclusion

Training Partner has always been in the forefront of tailoring and customization for learning management. In addition to a completely customizable administrator interface and full event-driven Visual Basic-compatible macro language, this new Online Designer puts the control of your learning environment completely into your hands. The Online Designer lets you design your training web pages for a truly customized learning experience for your organization and its learners.

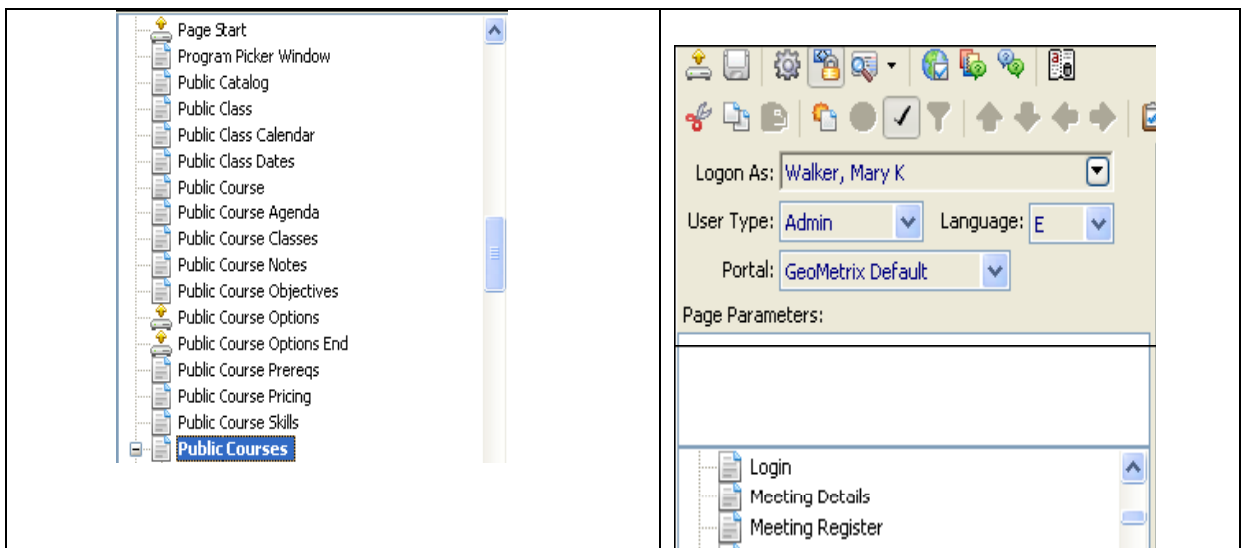
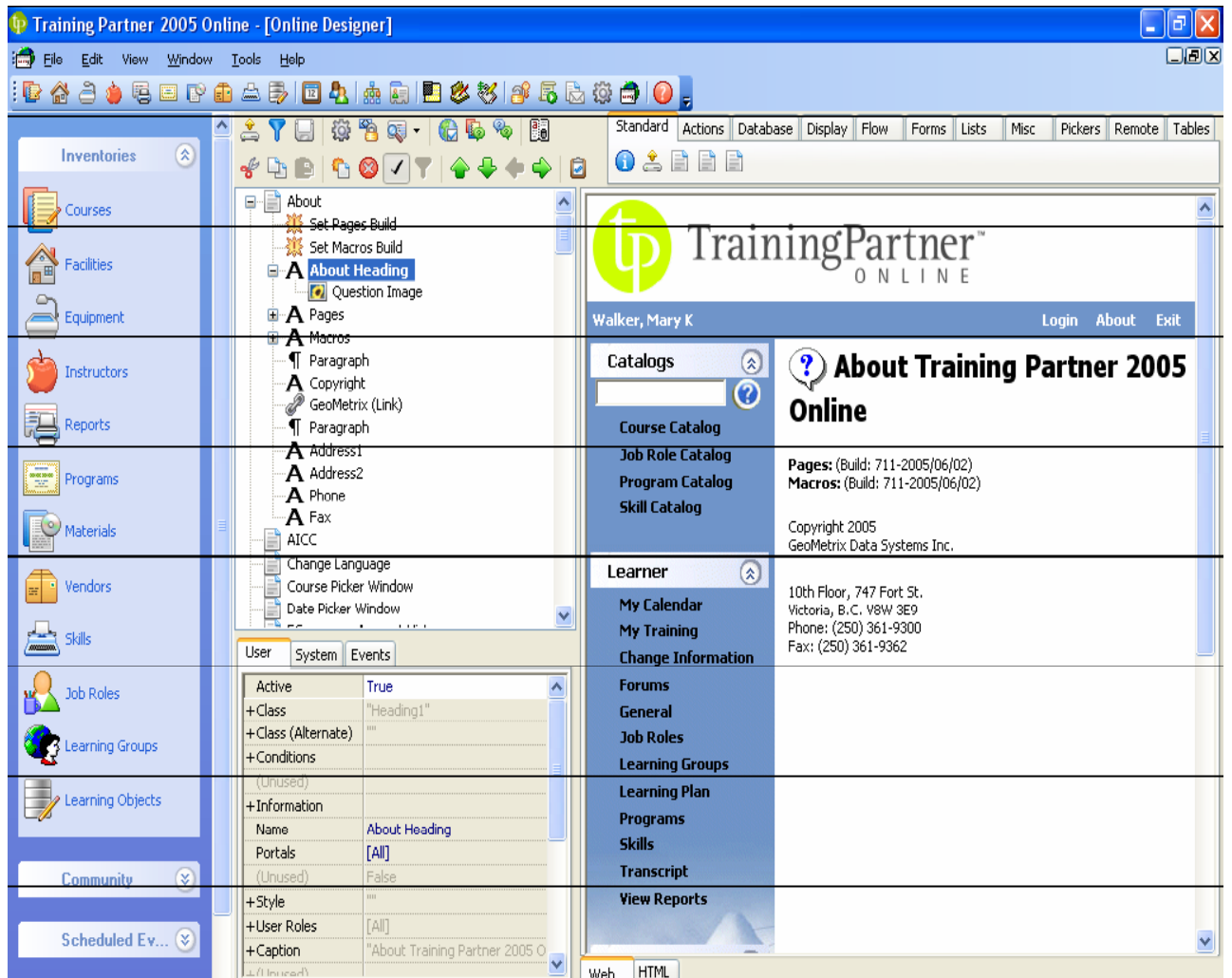
Custom learning management solutions created with the Online Designer can be deployed without the need for plug-ins or special firewall configuration. Performance is increased from previous systems by as much as ten times using compiled code rather than slower interpreted code found in ASP and script based systems. And installing maintenance releases or new versions of Training Partner Online is accomplished with a minimum of time and effort thanks to the systems unique component-based architecture.

The Training Partner Online Designer is the first tool in the industry to offer organizations complete control of their learning environment without the expense of developing and maintaining a custom system. No other technology offers the ease-of-use, performance,

extensibility and a seamless upgrade path for today's cost-conscious organizations. This new Designer proves once again that Training Partner truly is in a class of its own!

Over for Example Screen Shots.

Online Designer Windows:



- Application Basics
- CBTs
 - AICC Imported Courses
- Registration and Enrollment
 - Special Courses
- Reporting
- Scheduling
 - Advanced Scheduling

Name	Code
Application Basics	Basics
CBTs	CBT
AICC Imported Courses	AICC
Registration and Enrollment	Registration
Special Courses	Special
Reporting	Reports
Scheduling	Scheduling
Advanced Scheduling	Advanced

Action List

- Add Values
- Button
- Button (Submit)
- Button Image
- Calendar
- CheckBox
- ComboBox
- ComboBox (Data Aware)
- ComboBox (Data Aware, Selected)
- ComboBox Item
- Course Picker
- Course Picker Button
- Date Picker
- Date Picker Button
- Delete Record
- Edit Box
- Edit Box (Password)
- Element
- Field (Hidden)
- For Loop
- Form
- Format Long Text
- Get Item Code
- Get Item Name

User System Events

2003/08/24

GeoMetrix Data Systems Inc.
Instructor Qualifications
(Lambart, Connie)

Name	Status
Lambart, Connie	
Basic Report Creation	Preferred
Basics of Scheduling	Preferred
Managing and Tracking Students	Preferred
Training Partner Basics	Preferred
Training Partner Overview	Preferred

Sun	Mon	Tue	Wed	Thu	Fri
31	1	2	3	4	5
7	8	9	10	11	12
14	15	16	17	18	19
	Learners Crystal				
21	22	23	24	25	26
	TP Basics		TP Basics		
28	29	30	1	2	3

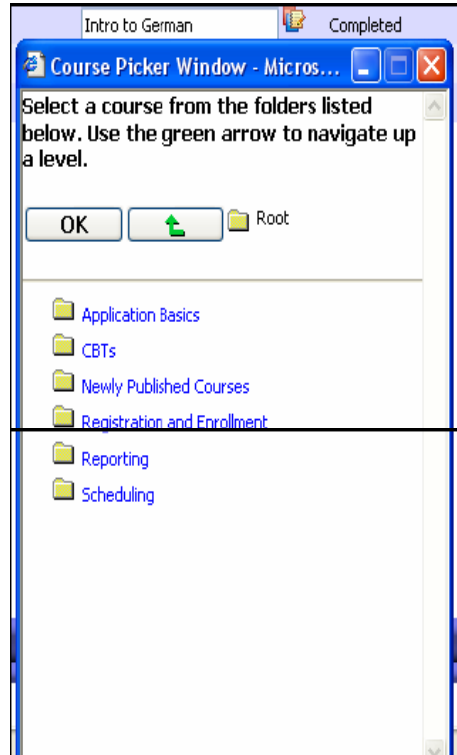
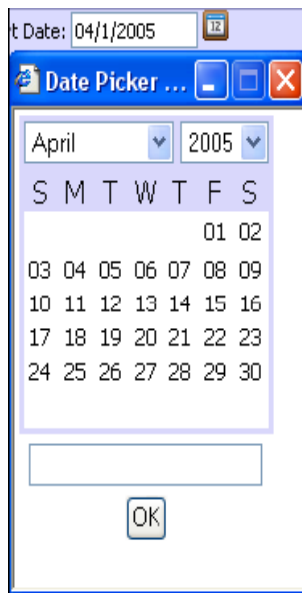
Personal Information

Prompt 1: Edit Text

Prompt 2: Value 2

Student My Training

- Set StudentNo
- Student Heading
- Supervisor Navigation Bar
- Upcoming Classes
- Upcoming Classes Table
- Unfinished Units
- User Created Table
- Unfinished Units Table
- Actions
- Action List



Appendix G - Virtual Training Assistant

1 Features of LMS

1.1. Administrator

The VTA Administrator the core module of the RISC system. Using Administrator a training administrator can:

- Create an on-line course catalogue that lists all courses or training events offered to students.
- Create training plans for students. Schedule instructor-led classes and, in the absence of [Learner](#), manage the enrolment for those classes.
- Associate self-study courses with CBT or WBT systems or other on-line delivery mechanisms, including Internet documents, for launch by VTA Learner.
- Track training history and status for students. Forecast training needs

1.2. Learner

Once the administrator has performed these basic tasks a student can access training information through the On-Line Enrolment System, or Learner. Learner allows supervisors or employees to enrol in training classes, launch training modules, or generate reports from their personal computer with just a few mouse clicks. Using Learner a student can:

- Enrol in or cancel from an instructor-led class.
- Perform full-text searches against the on-line course catalog to learn about available training.
- Generate reports showing the student's training history, schedule or training plan status.
- Launch web-based training, computer-based training or virtually any electronic document.

1.3. Evaluator

VTA Evaluator gives training departments a powerful tool for reducing training administration workload and improving the effectiveness of student testing. Evaluator is an on-line question bank that can deliver randomized tests to students over the Internet or an Intranet.

If the administrator has indicated that the student should be tested after completing the on-line lesson, Learner will launch Evaluator. Evaluator will then provide a randomized test to the student over the Internet or a corporate Intranet. The results of the testing are then recorded in VTA Administrator. Optionally Evaluator can require a supervisor to enter a password before the employee can take the test.

After receiving training the student can use Evaluator to provide class and instructor feedback.

1.4. Other Automated Input

RISC can integrate the Virtual Training Assistant with Human Resource Information Systems, CBT systems, Scantron® scanners and other electronic data storage. The Virtual Training Assistant is the place where a training administrator can go to get all training information for an employee – regardless of how that training was delivered.

1.5. Articulate Presenter

As an **add** on to the VTA Suite, RISC now offers the Articulate Presenter as a rapid development authoring tool to enhance the abilities of your training group. The Articulate Presenter is an affordable desktop solution, gives you all the tools you need to create engaging Flash presentations faster and easier than ever before.

Want to learn more or download a trial version? Click [here](#).

1.6. A Complete Solution

The key to the Virtual Training Assistant System is time. Your training department's time is not required in the day-to-day tasks of enrolment management, electronic content delivery and testing. Instead, the training department can concentrate on what it does best: design and develop quality training. Training management software from **RISC** can provide this complete solution.

Appendix H - Xtention Enterprise LMS v2.4

1 Features and Capabilities of LMS

1.1. *Industry Standards*

- SCORM certification

1.2. *Platform/Code*

- Microsoft .NET Platform

1.3. *Development Tools*

- Visual Studio.NET 2003

1.4. *Database*

- SQL Server

1.5. *Import utility Architecture of the LMS Application*

- 100% Web based

1.6. *Modular Design for Addition of Custom Features*

- Open architecture

1.7. *Integration*

- Willing to provide data base model
- Structure is open-ended so that other applications can be easily integrated with the LMS
- Experience with integration to ERP and CRM applications
- People Soft
- ADP
- SAP
- Other HR systems
- Can utilize Active Directory
- Ability to link to:
- Other web sites
- PDF and .docs
- Other files

1.8. *Search*

- Search catalogs and courses
- Search for users
- Search for tests

- Search for locations
- Search certificates and evaluations

1.9. Browsers

- IE 5.5 and higher
- Other browsers in beta

1.10. Profiles

- Independent of a predetermined hierarchy
- Can be self administered
- Easily updated
- Can be populated by a batch file from a company
- Categories viewable in drop-down menu
- Categories can be added and changed by administrator
- Input on adding categories is easy for the user and is an automatic option when a generic category is selected
- Can be integrated with HR data
- Number of profiles and/or groups is not limited
- Security access to Functionality and Content Administration:
- Administrator access only to modify/create Modules and Tabs dependent upon user profile
- Security set up is intuitive to use
- Have multiple security levels within a domain
- Has the ability to set security level by a category included in the profile
- Managers can assign courses to specific persons

1.11. Security

- Active Directory or Windows NT
- Built in authentication
- Password Encryption

1.12. Authentication of User

- Authentication to automatically populate and update
- Self-registration available for non-registered users
- Ability to update username

1.13. Security of Information

- Password security and verification
- Ability to add SSL to validate

1.14. Domain Set Up

- Wizard to set up portals
- Portal management within LMS
- Has the ability to serve up courses by profile
- When manager approval is needed

- When enrollment is open to a profile
- When profile changes in HRIS
- Offer multiple functionality within a specific domain
- Is independent of a security list
- Has the ability to display functionality of the system by profile
- Separate supervisor for portal management

1.15. E-Commerce

- Ability to display the cost of a course in units
- Ability to take credit card without customization

1.16. Ability to Allow Customer to Register for Courses Using

- Credit cards
- Against a prepaid balance serve up courses
- Ability to integrate to most existing e-commerce

1.17. On Line Courses

- Ability to serve based on time period by course
- Ability to serve based on time period by enrollment
- Ability to notify of upcoming expiration

1.18. Adding to the Catalog

- Products tested for use within Xtention where SCORM output is used within the tool
- Dreamweaver
- CA/MS
- Authorware
- Trainersoft
- Tool book
- Captivate
- Lectora
- Vendor Courses Tested:
- Netg
- Coastal
- Smartforce
- ITC
- Elemenet K
- Skillsoft
- Mindleaders
- SmithMedia
- Presentation of Content:
- Present content based on profile
- Serve up content based on what a person has achieved relative to prescribed in certification
- Track completion of courses by the individual
- Email notifications to course expiration
- Email notifications to certification expiration
- Improved user interface with sort and search datagrids

1.19. Functionality

- Ability to bookmark courses
- Ability to know time in course

1.20. Classroom Training Adding to Catalog

- Course Title
- Course Code
- Price and CEU
- Culture (chosen language of course)
- Learning Objective
- Directions
- Course Outline
- Link to information
- Prerequisite
- Ability to link to course prerequisites
- Can be made available to selected administrators
- Assign to certification

1.21. Cancellation of a Course

- Manager/administrator/trainer can cancel Classroom training
- Manager/administrator/trainer can cancel online training

1.22. Facilities Management

- Can be accessed when building a course
- Can have multiple facilities assigned to the same course
- Track availability by classroom and location
- View inventory of classroom
- Seating capacity by set up
- Facility contact information
- Notes for the instructor (open text field)
- Instructor Management Includes:
- Instructor profile
- Instructor availability
- View class roster by calendar
- View class roster by classroom
- Update attendance
- Update scores

1.23. Self-Registration Program User Functionality

- All registration information is included in one screen
- Registration information is automatically populated based on the person signed on
- Ability to make groups self-registering
- Ability to register for a prerequisite from the course catalog
- Email confirmation of registration is sent to participant

- Cancellation policy is displayed in registration screen and at time of registration
- Waitlist
- Ability to place users on waiting list when class is full
- View current classes and users on waiting list
- Notification of manager when user is on waiting list
- Notification of student when accepted to class
- Administrator Functionality
- Ability to turn registration requirements on and off by course
- Ability to automatically give access to course to people based on profile
- Ability to automatically enroll users in certificates based on course enrollment
- Ability to do batch registration
- Email confirmation to manager with courses requiring approval
- Ability to email managers course status change of assigned groups
- Ability to Regulate registration by Profile to turn on or off
- Require manager approval
- Regulate registration by Domain to turn on or off
- System Notification
- Customizable system notifications
- Logging
- Complete logging of actions performed, errors, and additional information in the system.
- Ability To Create A Certification Program
- Automatically display certification program by profile
- Ability to create certificates in multiple portals

1.24. Integrate Course From

- Classroom
- Online
- Third party courseware
- Course produced by customer
- Can be assigned by profile
- Ability to modify a person when requirement change
- Expiration data can be assigned
- Email is sent when certification is about to expire
- Ability to allow different data & background to display for various certificate programs
- Assessment Engine Assessment Types
- True/false
- Multiple choice
- Multiple choice with multiple answers
- Fill in the blank
- Matching
- Matching using .gifs or .jpeg
- Uploaded images for all question types
- See which answers were missed
- Randomize questions
- Create pools of questions, creating more available questions than are to be included
- Provide immediate feedback on an incorrect answer
- Indicate which questions must be asked in a test (on-line or printed)
- Ability to review answers on tests
- Integrated to Question Mark

- Printable presentation (pulling questions from pools)
- Evaluations/Survey
- Ability to create global course evaluations
- Ability to re-use course evaluations
- Ability to create global questions
- Ability to re-use evaluations questions
- End-user can make "open" comments on evaluation
- Evaluation report
- Ability to create general surveys
- Reporting
- On line
- Has the ability to produce new reports
- Export to PDF and HTML
- Reports enhanced with date parameters
- Report writer and designer with no additional charge
- Can be easily customized without programming experience by:
- Administrator
- Trainers
- Managers
- Multilanguage
- Ability to customize the user interface text
- Ability to use multiple languages (3 samples included in initial install)
- Ability to customize English text

1.25. Exportable To

- PDF
- Word
- Excel
- Can be printed
- No Runtime charge
- Marketing ability to send an email or run a report to let them know
- A new course is available
- A certification has been met
- A certification has expired
- A new requirement for a certification
- Course enrollment
- Course status change
- Ability to tie in to multiple mail systems:
- Outlook
- Internet email engines
- Collaboration
- Threaded discussions
- Announcements
- Calendar

Appendix I - Moodle LMS

1 Features of LMS

1.1. Overview

This document outlines the basic features of the LMS known as Moodle. It is intended to allow the reviewer to experience a hands-on approach to learning about the available features of this program. The style in which this is presented is in keeping with the philosophy behind Moodle's development as a learning tool.

Moodle was designed and developed by Martin Dougiamas, who has a computer science background as well as a Masters and PHD in Education. Martin released the first version of Moodle in 1999. He describes it as an ongoing project designed to support a social constructionist framework of education. The philosophy behind the design is based on a learning style or a way of thinking called a "social constructionist pedagogy". The ideology is best described using four main concepts, namely; Constructivism; Constructionism; Social Constructivism; and Connected and Separate.

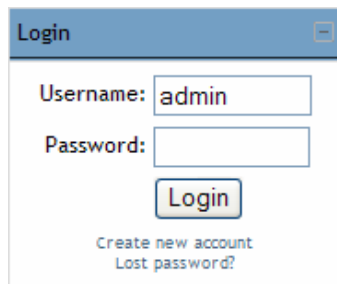
For more information on this and other background information, please visit the following website:

<http://moodle.org/course/view.php?id=29&username=guest>

1.2. Hands-on Demonstration

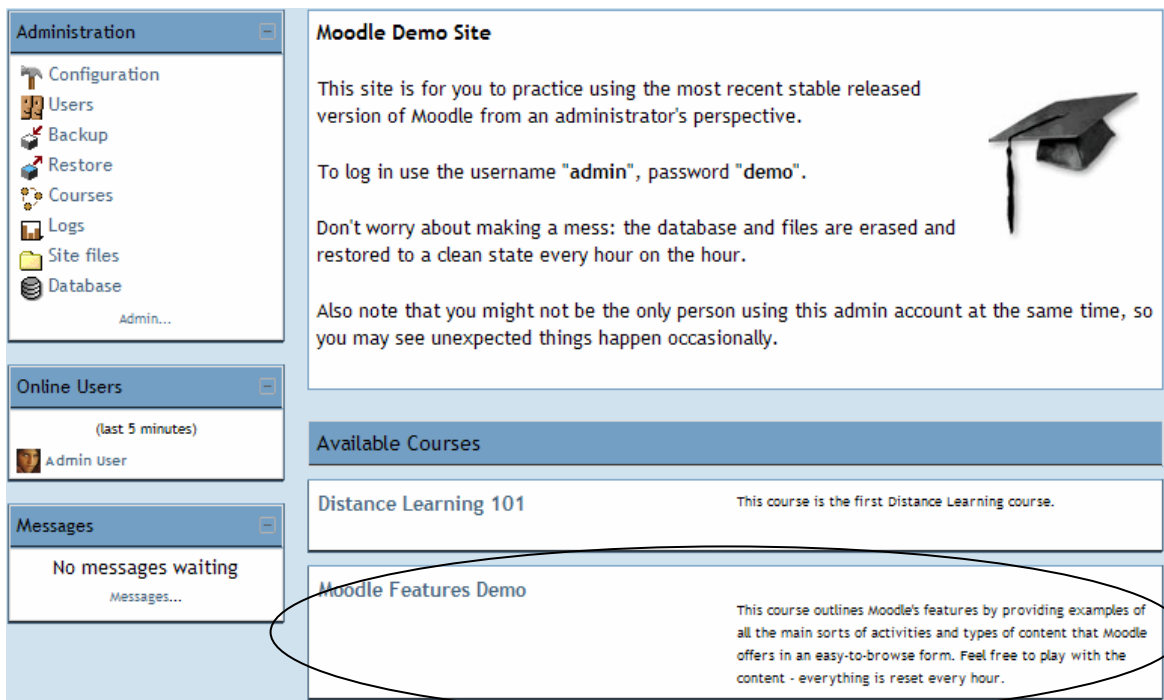
The following outlines how to test the Moodle LMS by easily accessing many of the features of the program.

4. For full testing ability of the following features:
5. Go to the Moodle Demo home page: <http://demo.moodle.com/>
6. Login as a guest administrator, i.e, Username: 'admin'; Password: 'demo'
7. Click the Login button



The image shows a screenshot of a Moodle login window. The window has a blue title bar with the text "Login" and a close button. Below the title bar, there are two input fields: "Username:" with the text "admin" entered, and "Password:" which is empty. Below these fields is a "Login" button. At the bottom of the form, there are two links: "Create new account" and "Lost password?".

8. The window refreshes to the following screen



9. Click on the Moodle Features Link at the bottom of the screen





10. From there you will find access to interactive examples of Moodle's features

1.3. List of Basic Moodle Features:





Once you have logged in, the following list of features is available from the following page:

<http://demo.moodle.com/course/view.php?id=3>

General features

-  [Overall design of Moodle](#)
-  [Site management](#)
-  [User management](#)
-  [Course management](#)

Text Filters (May be applied to any text in a Moodle site)

-  [Auto-linking](#)
-  [Mathematics notation](#)
-  [Media plugins](#)
-  [Multi-language content](#)

Assignments

Assignments allow teachers to grade electronically submitted material or 'offline' submissions such as paper-based assignments or class presentations.

 [An "Upload File" assignment](#)

 [An "Online Text" Assignment](#)

 [An "Offline" assignment](#)

Chats

The Chat module allows participants to have a real-time synchronous discussion via the web. This is a useful way to get a different understanding of each other and the topic being discussed.

 [A "Repeating" chat with public session logs](#)

 [A "Open" chat event](#)

Choices

Here a teacher asks a question and specifies a choice of multiple responses. This can be useful as a quick poll to stimulate thinking about a topic; to allow the class to vote on a direction for the course; or to gather research consent.

 [A Choice with anonymous results](#)

 [A Choice with non-anonymous results](#)

 [A Choice that allows you to update anytime](#)

 [A Choice with a limited number of responses allowed](#)

Forums

It is in forums that most discussion takes place. Forums can be structured in different ways, and can include peer rating of each posting. The postings can be viewed in a variety of formats, and can include attachments.

 [A Standard forum for general use](#)

 [Each person posts one discussion](#)

 [A single discussion](#)

Glossaries

This activity allows participants to create and maintain a list of definitions, like a dictionary. The entries can be searched or browsed in many different formats.

 [Teacher-Defined Glossary](#)

 [Learner-Defined Glossary](#)

 [A glossary of common terms](#)

Lessons




A lesson delivers content in an interesting and flexible way. It consists of a number of pages. Each page normally ends with a multiple choice question. Navigation through the lesson can be straight forward or complex.

 [How to use the Lesson Module](#)

Quizzes










This module allows the teacher to design and set quiz tests, consisting of multiple choice, true-false, and short answer questions and more. Each attempt is automatically marked, and the teacher can choose whether to give feedback or to show correct answers.

 [Moodle Quizzes](#)








-  [A short quiz about Moodle \(with timer\)](#)
-  [Example Listening Quiz](#)
-  [A quiz with a password](#)

Resources

Resources can be prepared files uploaded to the course server; pages edited directly in Moodle; or external web pages made to appear part of this course.





-  [A "Text Page" resource](#)
-  [A "Text Page" resource \(markdown formatting\)](#)
-  [A "Web Page" resource](#)
-  [A "Web Page" resource \(popup\)](#)
-  [A "Web Site Link" resource \(popup\)](#)
-  [A "Web Site Link" resource \(framed\)](#)
-  [A "Web Site Link" resource \(with parameters\)](#)
-  [A "Directory" resource](#)
-  [A "Label" Resource](#)

Links to different file types (Moodle automatically assigns the icons)

-  [An "Uploaded" resource, image](#)
-  [An "Uploaded" resource, MP3](#)
-  [An "Uploaded" resource, Flash](#)
-  [An "Uploaded" resource, Quicktime](#)
-  [An "Uploaded" resource, Windows Media](#)
-  [An "Uploaded" resource, Office](#)
-  [An "Uploaded" resource, PDF](#)




SCORM Packages

SCORM is a collection of specifications that enable interoperability, accessibility and reusability of web-based learning content.

-  [RELOAD demo package](#)
-  [Faceism](#)
-  [A SCORM package: ADL Maritime Navigation](#)
-  [Planets](#)

Surveys

The Survey module provides a number of verified survey instruments that have been found useful in assessing and stimulating learning in online environments.

-  [Critical Incident Survey](#)
-  [Constructivist On-line Learning Environment Survey](#)
-  [Attitudes to Thinking and Learning Survey](#)

Wiki

A Wiki enables documents to be authored collectively in a simple markup language using a web

browser. The Moodle Wiki module enables participants to work together on web pages to add, expand and change the content. Old versions are never deleted and can be restored.

 [Wiki uses](#)

Workshops

A Workshop is a peer assessment activity with a huge array of options. It allows participants to assess each other's projects, as well as exemplar projects, in a number of ways.

Optional Modules

Optional modules may be downloaded from the [Activity Modules](#) page.

Exercise

Hot Potatoes

Appendix J - ORIENTATION FEEDBACK FROM ACADEMIC INSTRUCTORS

Feedback is based on a survey questionnaire distributed among academic instructors. "1" is ranked to be the most popular topic requested. There were nineteen academic instructors who responded to the survey and the results are the following:

Popular topics that academic instructors felt were important and should be included in all orientation were:

1. Policy and procedure manuals
2. Unit-specific profile of patient information and case type scenarios
3. Contact lists of clinical educator
4. Ancillary services (parking, cafeteria)
5. Unit-specific routines and workflow

The following are topic that Academic instructors felt were commonly overlooked and should be emphasized more include:

1. Expectation of students and instructors
2. computer access system
3. policy and procedures for students and instructors

Effective orientation methods include:

1. Guided orientation tours
2. Shadowing with clinical educators (instructors)
3. Seek and find orientation checklists

E-orientation content information or feature suggestions include:

1. Orientation checklists
2. virtual tours (media)
3. site-maps (pdf)
4. search engine

Appendix K - Orientation Materials collected from various Health Authorities and Academic Agencies

Orientation Source	Type of Orientation	Comments
Vancouver Island Health Authority	New Employee Handbook, 2 CD's (Disaster Preparation, Orientation Warm-up, New Employee Orientation, Wellness & Safety	Simple layout Good reinforcement to the orientation, acts as a reference guide from CD Orientation Class
BC Children's Hospital	Outpatient Adolescent Assessment/Treatment Unit Preceptorship Pathway – case study	Very thorough Case study
BCCH – Unit Clear	New Hire Checklist	
VCH Guidelines (Draft)	Clinical & Practice Education	Layout structure from Student placement procedures and policies
Allied Health Orientation Package: C&W Health Care of BC		Very thorough, organized, clear on expectation
BCIT-Medical Radiology Program	Student Course Website	Very good layout, simple powerpoint, great use of graphics
BCW Physiotherapy Department	Student Handouts <ul style="list-style-type: none"> • Guidelines • Terminology • Objectives • Policy 	
Kelowna General Hospital – Central Okanagan IV Program	Simple General Orientation – power point	Too brief
Kelowna General Hospital – New Orientation Orientation	Include Interior Health Authority (IHA) – power point	
Kelowna General Hospital – Enterstomal Clinic	Orientation - PowerPoint	
BCCH – Cardio	Manual	
Sunnyhill Health Centre- Childlife Department; Therapeutic Recreational Services	Student Orientation Manual	Thorough
St. Paul's – Providence Care, Nursing	New Employee Orientation Manual	Nursing program Information is being update
BCIT – Medical Radiology	Clinical Education	Information are noted to be

Program	Guidelines- PowerPoint	out-of-date
Royal Inland Hospital - Pharmacy	Manual	Comprehensive
Royal Inland Hospital -	New Employee Orientation Manual	Comprehensive
Royal Interior Hospital -	Policy Manual	
Royal Inland Hospital - Medical Imaging	Orientation	

Appendix L - HSP Net Integration: Requirements Discussion Paper



Enhancement Name:	e-Orientation for Practice Education (e-OPE)	Updated: Oct. 13, 2005 DRAFT Version 1.1
Requestor(s):	PEIF Project - Collaborative for e-orientation for students and faculty	
Enhancement Description: <i>(Adapted from PEIF Award Application, Round 1)</i>	<p>The e-OPE project will enhance HSPnet to integrate with and/or encompass tools for creating and managing online content to support orientation of students, faculty and preceptors. The tools will facilitate sharing of resources and “learning objects” that are developed across various health and human service programs and sites for orientation programs. Content will arise from existing orientation programs and will be built upon a template of prioritized orientation content. The resulting template, and e-OPE tools to support collaboration and resource sharing, will improve effectiveness of orientation activities and will avoid duplication of effort by practice education partners.</p> <p>This document outlines the requirements for e-Orientation from the perspective of existing HSPnet users and students as a proposed new user group, and in terms of development and infrastructure enhancements required for HSPnet.</p>	

Evaluation Plan

Quality Indicators for e-OPE

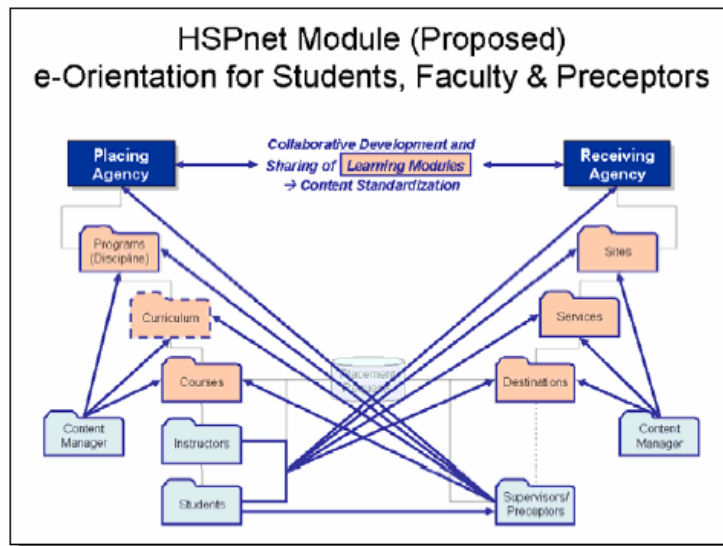
Indicator	Proposed Measure	Proposed Tool
Consensus on the tool's purpose and potential value	<ul style="list-style-type: none"> User ratings on contributions to collaboration and quality of learning (educators, receivers, and students) 	<ul style="list-style-type: none"> Discussion Paper and feedback from BC and AB users e-OPE User Satisfaction Survey (to include both users and managers or decision makers that may only use the resulting data)

Indicator	Proposed Measure	Proposed Tool
Potential and realized contribution to PE quality	Perceived value of the data and processes for tracking e-Orientation progress, improving learner outcomes	<ul style="list-style-type: none"> e-OPE User satisfaction survey (post implementation) student, preceptor, instructor evaluations (pre- and post-implementation)
Sustainability	<ul style="list-style-type: none"> Adoption rates (future) timeliness of e-OPE content updates 	<ul style="list-style-type: none"> Report on % and comprehensiveness of e-OPE use Aging reports on e-OPE content updates
Ease of Use	<ul style="list-style-type: none"> Ease of use ratings (e-OPE tools, reports) 	<ul style="list-style-type: none"> Post-implementation User Satisfaction Survey Course Evaluations (e-OPE launch) Design team focus group

e-OPE Requirements and Integration with HSPnet

This project provides a unique opportunity to leverage existing HSPnet data, functionality, and support infrastructure to deliver content that supports preparation of a student and an instructor to their placement site, familiarizes a preceptor with the student's educational program, and facilitates communication between a student and their preceptor.

Student / Instructor / Preceptor Perspective - Our experience with HSPnet implementation to date suggests that users are most likely to use the system frequently (and to respond to alerts) when there are multiple services or functions available to them. We would therefore include e-OPE functionality as part of a "bundle" of functions for students, instructors and preceptors. For example, the bundle of services for students could include the following:



Function	Availability in HSPnet; Requirement to Adapt for Students	Proposed Inclusion in e-OPE
Access to information about their current or upcoming placement(s)	Available; allow view only access and/or limited access to some data	Phase 1 (via PEIF Round 2 funding)
Access to their placement history in the current educational program	Available	Phase 1
Access to their online student profile; tools to update portions of their own profile including upload of resume or other documents	Available; provide tools to allow multiple data uploads, version management and alerts to instructor or PC if documents need to be approved prior to release	Phase 1
Access to information about Receiving Sites	Planned for release by November 2006 as part of the PEIF project for a Practice Education e-Community (online guidelines and policies by Discipline, Agency, Site, Service or Unit)	Future

Function	Availability in HSPnet; Requirement to Adapt for Students	Proposed Inclusion in e-OPE
Link to contact Preceptor or supervisor	Available	Phase 1
Link to e-Orientation module	To be developed as part of this project	Phase 1
Report on e-Orientation status	To be developed as part of this project	Phase 1
Messages and broadcasts (from school, receiving site, other members of Practice Education e-Community)	To be developed	Future

Content Developer Perspective - We expect that a significant portion of the user group that will be responsible for initiating or maintaining e-OPE content will already be users of HSPnet, or will become users in the future with continued adoption by additional sites and disciplines. Therefore, such users will already have access to or will gain a bundle of interrelated features that will complement the benefits of online tools for e-OPE content management.

For these and other users of HSPnet, it will be important to provide a consistent “look and feel” across existing HSPnet screens and the e-Community module currently under development, and the new linked e-OPE module if purchased or obtained from a third party. Equally important, will be to leverage existing data and screens in HSPnet rather than duplicating this information in the linked module. Opportunities to leverage existing HSPnet data and functionality include:

Existing HSPnet Data or Function	Applicability to e-OPE	Proposed Inclusion in e-OPE
Online Course Profiles	Content developers may wish to view course requirements and information on student competencies	Phase 1 (via PEIF Round 2 funding)
Online Profiles by Educational Program, Receiving Agency, Site, Service or Destination	These existing structures can be used to define e-OPE requirements at each level (i.e. all students in Obstetric units need to complete xxx module)	Phase 1
PE e-Community (e-Comm) Content	Content developers may be able to reference content on the e-Comm infrastructure (by agency, site, service, unit) and/or to re-use existing content as e-OPE content (or vice versa)	Phase 2 – link to the e-Comm Project completion in November 2006
e-Comm Communication Tools	Content developers can initiate or participate in collaborations on best practices, guideline development, etc.	Phase 2 (see above)

e-OPE Requirements – Existing HSPnet User Perspective - Existing HSPnet users who are not e-OPE content developers will still access and benefit from its functionality and data. For example, receiving agencies will define their e-OPE requirements by site, service or unit (or may “subscribe” to content for a discipline-wide or interdisciplinary requirement) as part of the existing online Profile. Placing Coordinators and instructors will benefit from the ability to track student compliance against e-OPE requirements and to link this compliance to other program or agency requirements, such as criminal records check and immunizations as being tracked in the Student Prerequisites (SPRE) module under development for release in October, 2005. Specific tools and linkages for existing HSPnet users will include:

Existing HSPnet Data or Function	Applicability to e-OPE	Proposed Inclusion in e-OPE
Course Profile	Placing Agencies can identify which e-OPE modules are required by students in a program or specific course (e.g. prior to first Surgical placement) or by preceptors receiving those students	Phase 1 (via PEIF Round 2 funding)

Existing HSPnet Data or Function	Applicability to e-OPE	Proposed Inclusion in e-OPE
Agency, Site, Service, Destination Profiles	Receiving Agencies can identify e-OPE requirements of students placed in a given area and the faculty/instructors that supervise them	Phase 1
Discipline e-OPE profiles	Agencies can collaborate to define e-OPE requirements for all students, instructors, and/or preceptors in a given discipline	Phase 1
Student/Preceptor/Instructor ID Maintenance	<ul style="list-style-type: none"> ▪ Placing Agencies can determine whether and when to generate Student ID's for HSPnet access, and can request delivery via email or print 	Phase 1
e-OPE tracking and reports	<ul style="list-style-type: none"> ▪ Placing Coordinators and/or instructors can track progress of students or preceptors against e-OPE requirements; Students can track their own progress ▪ Receiving Sites can track status of e-OPE for incoming instructors and students 	Phase 1

e-OPE Requirements – Hardware & Software

It is expected that Student access will be accommodated through dedicated web and database servers to ensure that student volumes do not impact other HSPnet users. Performance monitoring will therefore be tailored to the needs of each access point, with associated segmentation of future upgrade requirements.

e-OPE Requirements – User Training and Support

Training for content developers will be addressed as part of the Phase 1 training plan. However, it is expected that training for content developers would be in fact delivered via the e-OPE tool and would not have any ongoing requirement for classroom based training (as for other HSPnet users). If there is an ongoing training requirement this would be addressed in the e-OPE Sustainability Plan, to be developed as a final deliverable of Phase 1 (see below), and would be incorporated into the existing HSPnet training curriculum as appropriate.

e-OPE Sustainability

There will be ongoing costs associated with supporting e-OPE in the form of Help Desk support, student ID management (monitoring usage, deleting inactive users, handling rejected email messages, etc.), and maintenance of user support materials. These costs can be minimized by combining with existing user support activities already funded in each HSPnet province. An e-OPE Sustainability Plan will be developed in the early stages of the Phase 1 project to allow HSPnet provinces that wish to operationalize e-OPE to develop a cost sharing formula and to adjust their operating budgets for the post-project period.