

SUNY LEARNING NETWORK

LEARNING ENVIRONMENTS TASK FORCE REPORT

RECOMMENDATIONS FOR THE SUNY
LEARNING NETWORK'S NEXT-GENERATION
TECHNOLOGY STRATEGY

JUNE 1, 2005

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PREFACE

The State University of New York is committed to its mission of providing the broadest possible access to high-quality education for a wide diversity of students and impact on society through teaching, research, and public service opportunities. As the SUNY community looks to its future, it is imperative that we consider the profound impact that technological change will have on the ways in which the constituent campuses can continue to fulfill their respective missions. It is equally imperative that we face these changes together, as a community, so that we may fulfill our collective obligations to provide both quality services to our students, faculty, and staff and outstanding value to the taxpayers of New York.

SUNY Learning Environments (LE) has a unique opportunity to engage the SUNY community in a discussion about goals and priorities for the SUNY Learning Network's (SLN's) next-generation technology strategy. Accordingly, LE has convened a Task Force of representatives from across the SUNY system to envision a future in which all of SUNY could be supported by a common online environment for teaching, learning, and research, with all the benefits of system-wide collaboration yet without compromise to the respective needs and missions of the constituent campuses.

Meeting the challenge presented to the Task Force, LE, and the SUNY community entails both an act of faith and an act of will. The act of faith lies in choosing to believe that all SUNY campuses, whether large or small, upstate or downstate, community colleges or research centers, can identify common elements for an online environment able to effectively serve the current and future needs of SUNY's 415,000 students and 30,000 faculty members. The act of will lies in keeping our attention resolutely focused on our common goals, maintaining a SUNY-wide view of the greater good while also faithfully representing the distinctive needs of its constituent campuses.

This document presents the Task Force's findings.

STRATEGIC RECOMMENDATIONS

The guiding vision stated in the beginning of the Task Force’s charter reads as follows:

*[To] create, deploy, and support a collaborative online teaching, learning, and research¹ environment for **all** of SUNY.*

We interpret this vision statement to mean that Learning Environments (LE) seeks to transform the SUNY Learning Network (SLN) into the optimal learning environment for all SUNY campuses while setting a national standard for collaborative and cost-effective implementation. Accordingly, we have identified a number of overarching principles that we believe are necessary to achieving that vision.

First, we affirm the four promises made to this body by LE:

1. **Supporting the grass roots:** All substantial affordances² in SLN’s current platform will be carried forward to the next generation.
2. **Establishing a baseline of competitiveness:** SLN’s next-generation platform will contain all substantial affordances currently available in the base configurations of the major learning management systems (LMS’s). This standard of competitiveness is considered to be a starting baseline and minimum requirement.
3. **Responding to the guidance of the task force:** LE will issue a report in response to the Task Force’s report which outlines SLN’s technology strategy and explains how it aligns with the recommendations contained in this report.
4. **Providing ongoing calibration of future development:** A standing committee of SLN community members will be convened to help ensure that future development plans will continue to reflect the priorities set by the Task Force.

In addition, the Task Force recommends that the following principles guide LE’s strategic planning:

- **Prioritize and emphasize teaching and learning:** One of SLN’s key competitive differentiators has been and should continue to be its focus on delivering tools, training, and research that promote the best possible learning experience for SUNY’s students. SLN should maintain this emphasis on teaching and learning excellence and should expand it by supporting multiple pedagogical approaches and supporting tools, especially in the area of discipline-specific teaching innovations. SLN should also continue to support and promote its research into online teaching and learning, which has shaped the design of its learning environment to-date and should continue to drive future development.
- **Harness the strength and diversity of the SUNY federation:** An optimal learning environment for all of SUNY must be flexible enough to accommodate the distinctive

¹ With regard to research, the charter notes only that it should be “explored further, within the context of SLN.” The task force has accordingly focused its main effort on defining the goals for teaching and learning. See Appendix I for the full text of the charter.

² The term *affordance* is drawn from the literature of both industrial design and cognitive psychology. It refers to the “action possibilities” latent within an object or interface, i.e., the capability that it grants to the user. An affordance is distinct from a *feature*, which is a specific (and often technology-specific) implementation of an affordance.

missions of each of the sixty-four campuses. Furthermore, the structure of the environment should enable the campuses to benefit from the federated structure of the SUNY system which, by design, empowers each campus to make resource investment decisions that best serve the needs of its students and faculty. LE's technology strategy should therefore support campuses' freedom to align their resource investments with their individual needs, while simultaneously working to lower the barrier to resource pooling among the campuses whenever there is mutual benefit to be gained.

- **Maintain excellence in service:** LE's current challenge of defining and implementing a next-generation platform should always be considered within the context of SLN's larger mission of providing services to the campuses through a *combination* of technology, services, and expertise. Like the emphasis on teaching and learning, high-quality services have been and should continue to be a key competitive differentiator for the program. At the request of LE's Executive Director, we have included an appendix to this document outlining some of the support and service affordances that the Task Force deems essential to SLN's mission. LE should also charter a successor body to this Task Force empowered with the specific charge of setting priorities for further development of SLN services.
- **Plan for tomorrow's campuses:** While much of this report is necessarily concerned with the relatively immediate needs of the constituent campuses, SUNY will be served best by keeping the future in mind. LE's technology strategy should place emphasis on providing a system that will enable SUNY to respond quickly and efficiently to future needs and innovations. This includes giving strong consideration to ease of integration, since online learning environments will inevitably become more deeply enmeshed with a range of information systems across campuses.
- **Support a smooth transition:** The faculty and staff of each campus have invested substantial time and effort in creating course content, learning technology interfaces, and tuning their support processes to fit best with their current technology platform, whether that platform happens to be SLN or one of the commercial or Open Source alternatives. The challenges of migrating to a new platform will be unavoidable. LE should therefore include as part of its strategy an array of technologies and services designed to ease the challenges of transition as much as possible.
- **Develop open and transparent governance:** The recommendations listed above can all be best achieved in close communication and cooperation with the campuses, in the same spirit in which this Task Force was chartered. LE should develop governance and communication structures for SLN that maximize both the effective input from the campuses and the transparency of major decision-making processes. As with services, LE should charter a committee to recommend improvements in governance.

SUMMARY OF CRITICAL FUNCTIONAL REQUIREMENTS

The Task Force has identified a number of high-level functional requirements for the next-generation platform. These requirements map to affordances which, in turn, map to features.³

The functional requirements we have identified are as follows:

- **Interface:** The user interface should be quick and responsive, easy for faculty and students to learn and use, present navigation in an intuitive and visually compelling way, and support appropriate accessibility standards.
- **Tools:** The system should facilitate best online teaching practices through the structure of its provided tools and interfaces. Further, it should support collaboration beyond courses, including student support as well as research and collaboration among stakeholders. It should support a range of teaching and learning modalities, such as the presentation of visual materials and synchronous communication. It should enable students and their teachers to keep track of their progress. It should also support collaboration and re-use, enabling faculty to move content in and out of the system, share and re-use content, and maintain long-term archives of course content easily. Finally, it should provide a student-centric approach, allowing students to collect vital information they need to track across all their courses.
- **Integration:** The system should integrate and interoperate with a wide range of campus systems, including Student Information Systems (SIS), library resources, campus portals, and support systems such as advisement and billing systems. It should also provide best-in-class support for quickly integrating new tools and innovations.
- **Enterprise and System Administration:** The platform should provide students and faculty with appropriate protection of their privacy through robust security, effective authentication, and appropriate roles and permissions. It should support state requirements for monitoring attendance, and allow campus administrators to obtain the kind of usage statistics that will enable them to monitor their campus' return on their investment. It should enable workflows for content creation, editing, and publishing. Finally, it should offer flexibility to accommodate intra- and intercampus differences in administrative structures by allowing customized roles and privileges for various administrative duties as well as a range of configuration options to support the sharing of content and resources across multiple sections of a class.

³ The Task Force has provided a representative (i.e., non-exhaustive) mapping of important affordances to features. See Appendix II for details.

APPENDIX I: LEARNING ENVIRONMENTS TASK FORCE CHARTER

<p>SLN VISION</p> <p>Create, deploy and support a collaborative online teaching, learning, and research⁴ environment for all of SUNY.</p>
<p>WHAT THE VISION MEANS</p> <p><i>Imagine</i> if SUNY did all of its online learning, research and collaboration on a common platform...</p> <ul style="list-style-type: none"> ▪ Imagine cross-campus degrees & new programs ▪ Imagine lifelong SUNY learners from high school through seniority online ▪ Imagine bringing a more diverse student population, nationally & internationally to SUNY ▪ Imagine unleashing academic activities beyond what is achieved in traditional modalities⁵ ▪ SLN supports the entire spectrum of e-learning ▪ SLN's goal is to serve all SUNY campuses on an interoperable⁶ platform and support programs, including enterprise systems ▪ SLN integrates communities, services and technologies for online learning by identifying, developing and promoting best practices ▪ SLN collaborates with SUNY campuses and U-wide programs to achieve academic excellence and economies
<p>SUNY LE TASK FORCE: CHARGE</p> <p>To make recommendations for the requirements for a Learning Management System that can serve all SUNY and its online learning needs...</p> <ul style="list-style-type: none"> ▪ User requirements ▪ Migration strategy ▪ Continuous improvement process and governance
<p>TASK FORCE GOALS</p> <ul style="list-style-type: none"> ▪ What are the requirements of an LMS that enables the best learning and teaching online? What functions and activities do we want in the virtual classroom? ▪ What will ease, enable and empower the experience of students, faculty, advisors and technical support that use SLN? ▪ What qualities of an LMS make it the compelling choice⁷ for all campuses, including business and technical requirements?
<p>TASK FORCE OPPORTUNITIES</p> <ul style="list-style-type: none"> ▪ Think U-wide thoughts (avoid campus, technical, and disciplinary parochialisms) ▪ Assume the vision (don't debate its merits or feasibility) ▪ Dream it up! (avoid shopping for or comparing specific LMS's)

⁴ Explore the dimensions of research further, within the context of SLN.

⁵ Discuss non-traditional modalities more. An example of non-traditional modalities might include course lengths that vary from the traditional periods.

⁶ Interoperability might include a common platform and/or centralized repositories.

⁷ Factors that would make SLN a 'compelling choice' might include: ease of learning, flexibility to integrate tools, total cost of ownership/economic feasibility within SUNY, 'faster, cheaper, better', adaptability to future needs, etc.)

APPENDIX II: AFFORDANCES, SUCCESS INDICATORS, AND REPRESENTATIVE FEATURES

Interface • SLN must offer the following:			
Affordances	Success Indicators	Base Configurations of LMS⁸	Core features identified by LE Task Force
a) a user experience that is quick, available, and responsive within the constraints of the desktop and network platforms that faculty and students use	<ul style="list-style-type: none"> ✓ increased faculty and student participation ✓ reduced number of complaints regarding technical issues, frustrations 		<ul style="list-style-type: none"> ✓ students and instructors can search all course content, discussion postings and email messages within the course
b) a system that is easy for faculty, staff, and students to learn, manage, and navigate as effortlessly as possible	<ul style="list-style-type: none"> ✓ increased faculty and student participation ✓ adaptation to the new interface with minimal time demands ✓ feedback from faculty, staff, and students on ease of use 		<ul style="list-style-type: none"> ✓ online editor that allows for creation of basic web page layouts and integration of other web media: for both instructors and students, as specified at the campus level
c) an interface that can communicate both content and functionality in a visually compelling way	<ul style="list-style-type: none"> ✓ use of multiple modalities ✓ assessment and analysis of interface design by campus faculty in appropriate fields (e.g., graphic & web design faculty and students) 		<ul style="list-style-type: none"> ✓ course interface maps the learning experience rather than the software's functionality ✓ the course map creates a primary interface for students that reflects the instructor's organization of the material – often, though not always, walking the students through the learning experience temporally, much like a syllabus ✓ ability to customize the course map, based on campus-based standards
d) an interface that provides content that is in compliance with ADA guidelines or that can be provided by alternative accessible means.	<ul style="list-style-type: none"> ✓ content that is accessible to all ✓ approval by ADA assessment service(s) 	<ul style="list-style-type: none"> ✓ instructors can add alt tags to uploaded images ✓ all system images contain alt tags ✓ all framesets are appropriately titled with descriptions of the functionality of the frames layout ✓ the system allows invisible navigation links to be used by screen readers 	<ul style="list-style-type: none"> ✓ design for accessibility to meet State and Federal guidelines

⁸ Base Configurations of LMS: These are the features entailed by the first two promises made by LE to the Task Force. (See the “Strategic Recommendations” section for details.) For the purposes of compiling this table, features were identified using the Edutools web site and internal marketing documents created by SLN. **Blue are features contained in ANGEL 6.2, Blackboard 6, and WebCT 4.1 Campus edition; red are features now available in the SLN templates that are not also included in all three of the base configurations of the major commercial products.**

Tools • SLN must assure the ability to:			
Affordances	Success Indicators	Base Configurations of LMS	Core features identified by LE Task Force
a) flexibly integrate components	<ul style="list-style-type: none"> ✓ implementation of tools that support technical and pedagogical advances ✓ feedback from faculty, staff, and students on range and type of tools needed to complete necessary teaching and learning tasks 		
b) easily and efficiently handle the appropriate import, archive and export of materials, including pre-packaged course materials	<ul style="list-style-type: none"> ✓ development of materials and coursework in a variety of applications ✓ campuses and faculty repurposing course content 	<ul style="list-style-type: none"> ✓ instructors can batch download current copies of all course materials to their local hard drive ✓ students and instructors can attach files in multiple formats 	<ul style="list-style-type: none"> ✓ ability to publish course content to CD-ROM for specific audiences (e.g. eArmyU) ✓ tool to locate and report bad links, both internal and external ✓ portability of course content, including support for SCORM import and export
c) enable faculty to work totally offline (with the exception of synchronous communications)	<ul style="list-style-type: none"> ✓ fulfill the need for faculty to work without a persistent network connection 	<ul style="list-style-type: none"> ✓ instructors can prepare all course materials offline and synchronize them with the server ✓ instructors can download all discussions and student assignments, respond to them offline, and then synchronize their responses with the server 	<ul style="list-style-type: none"> ✓ faculty can replicate a local copy of their course, make changes and enhancements, and review student contributions without having internet connectivity ✓ provide faculty with robust backup capabilities ✓ provide a “staging area” that is invisible to students for faculty use in making changes before uploading them to the student space
d) provide integrated guidance and support for instructional design	<ul style="list-style-type: none"> ✓ structured course development by faculty with varying levels of design experience 	<ul style="list-style-type: none"> ✓ instructors can use templates to create course content ✓ instructors can use a wizard to walk them through the template population process 	<ul style="list-style-type: none"> ✓ course creation process that walks faculty through the pedagogical thought process: the course wizard prompts faculty to think about the kinds of pedagogical experiences that they want the students to have and configures the course environment based on faculty input on those pedagogical issues
e) support the best-in-class synchronous capabilities for class meetings and group work	<ul style="list-style-type: none"> ✓ feedback from faculty, staff, and students on effectiveness and immediacy of synchronous collaboration 	<ul style="list-style-type: none"> ✓ The chat tool supports private messages ✓ The system creates archive logs for all chat rooms ✓ The software supports an instructor-controlled whiteboard ✓ The whiteboard supports image uploading and annotation ✓ The software can archive a snapshot of whiteboard sessions for future viewing 	
f) automatically and completely convert all existing SLN Lotus Notes-based materials	<ul style="list-style-type: none"> ✓ “frictionless” movement of materials from a proprietary format 		
g) allow students to track assignments across courses	<ul style="list-style-type: none"> ✓ student enrollments in more than one online course in a term 	<ul style="list-style-type: none"> ✓ students have a personal home page that lists all the courses in which the student is enrolled and all the system-wide events and tasks 	

Affordances	Success Indicators	Base Configurations of LMS	Core features identified by LE Task Force
<p>h) incorporate a comprehensive range of assessment and related communication capabilities to faculty</p>	<ul style="list-style-type: none"> ✓ effective feedback to students ✓ efficient access to assessment statistics and communication features 	<ul style="list-style-type: none"> ✓ Instructors can create true/false, multiple choice, matching, and short answer questions ✓ The system automatically scores the above ✓ Instructors can import questions from existing test banks ✓ Instructors can create self-assessments ✓ The system can display instructor-created feedback ✓ Instructors can mark assignments and short answer tests online ✓ Instructors can assign grades to discussion posts 	<ul style="list-style-type: none"> ✓ Full featured testing system that provides instructors with a variety of online, automatically-scored assessments, surveys and tests. ✓ Ability to create multiple choice, true-false, exact match, short essay, drag and drop tests in any combination of question type with test bank support ✓ Ability to randomize, present time release, and time tests ✓ Ability to consolidate individual and group participant response in a single document with summary displays for evaluations and discussions
<p>i) provide students with a personal tracking system within each course as well as faculty access to that tracking information</p>	<ul style="list-style-type: none"> ✓ provide students with a personal tracking system within each course as well as faculty access to that tracking information ✓ (same as affordance???) 	<ul style="list-style-type: none"> ✓ students can make private notes about their course ✓ students can search all course content and discussion postings within the course ✓ students can access a product knowledge base ✓ students can view their grades ✓ students can keep track of all their assignment deadlines and due dates in the course calendar ✓ student can view their evaluations of completed assignments, instructor feedback, and points or percentages ✓ students can create shared references for a class, organized by date, title, or media ✓ students can save private drafts of assignments 	<ul style="list-style-type: none"> ✓ ability for students to create and manage their own discussion and project groups, both synchronous and asynchronous ✓ ability for students to take and save notes directly on course pages (students can then print or download their notes into a study guide) ✓ tools to allow students to post instant feedback on content; optional anonymous mode

Integration • SLN must assure the ability to:			
Affordances	Success Indicators	Base Configurations of LMS	Core features identified by LE Task Force
a) automatically create class instances and enroll students directly from the campus SIS system	✓ streamlining of the registration process		
b) construct live links or “conduits” between SIS and the CMS, which should be constructed to allow live polling and posting of data within the framework of the CMS	✓ single login for posting of material or locating information such as grades		✓ automated enrollment and reconciliation process
c) a learning environment that integrates with related support functions such as advisement, registration, billing, etc.	✓ facilitation of learning experience broader than just the classroom ✓ feedback from faculty, staff, and students on effective integration of these functions		
d) integrate appropriate supplemental electronic resources, including major proprietary resources	✓ effective and efficient integration with library databases and content into courses		✓ ability for instructors to easily upload content provided by textbook publishers and other third-party vendors
e) integrate with portals of the individual campuses	✓ easy access to the system by stakeholders		
f) create an environment that supports the integration of discipline specific tools	✓ adoption by faculty in disciplines and programs with image-heavy or other appropriate curricular requirements	✓ instructors can use a MathML equation editor to enable students to enter and edit mathematical notations	✓ support the display of annotation of images as well as related collaborative learning activities

Enterprise and System Administration • SLN must assure the ability to:			
Affordances	Success Indicators	Base Configurations of LMS	Core features identified by LE Task Force
a) provide stakeholders with robust security	✓ security breaches are relatively few/minor when compared to similar enterprise systems		
b) include effective tracking capabilities	✓ ability to easily monitor student attendance and track student activity	<ul style="list-style-type: none"> ✓ reports showing number of times and date that each student accessed course materials ✓ ability to set a flag for individual course components to track the frequency with which students access those components 	✓ ability to track participation, student review of content and overall usage statistics
c) assure the identities and appropriate access levels for users (i.e. authentication and authorization)	✓ provide access to a wide variety of specific services and information, as appropriate to each user's defined role in university system	<ul style="list-style-type: none"> ✓ administrators can protect access to individual courses with a user name and password ✓ the system can authenticate against an external LDAP server or using the Kerberos protocol 	<ul style="list-style-type: none"> ✓ site access and authentication should be set at the campus level ✓ faculty, students and guests have a single login for both campus and SLE activities ✓ permission systems set by and controlled at the campus level ✓ ability to control whether or not faculty can add guests, based on campus guidelines
d) provide an authentication system that can make use of a variety of common authentication and allow the scripting of custom interfaces	✓ use of different authentication schemes		
e) allow for scalability and replication within programs and in the development of new programs	✓ allow campuses to grow their online programs economically		<ul style="list-style-type: none"> ✓ ability to customize design elements, based on criteria set at the campus level ✓ support branding by college or program at all levels of the course ✓ ability to create and manage courses both manually and via a batch process ✓ ability to create a master copy of a course that can be used for pouring multiple sections ✓ provide a development and staging area for new courses that is available independent of specific terms (to support creating courses as far in advance as possible) ✓ ability to create courses that are not tied to a term or semester ✓ access to a course, closing a course, archiving and similar events should be based on start and end dates or through campus controlled tools
f) allow faculty to share resources	✓ ease of access and use resulting in increased faculty collaboration		

Affordances	Success Indicators	Base Configurations of LMS	Core features identified by LE Task Force
g) flexibly share resources and enrollments across sections while also providing distinct information required by the SIS	<ul style="list-style-type: none"> ✓ increased faculty collaboration between and among sections, departments, campuses ✓ correct, trouble-free coordination between SIS systems regarding each course 		
h) obtain up-to-date reports on course usage, system usage, and other related information	<ul style="list-style-type: none"> ✓ implementation of an accurate, easily accessible, available reporting system 		<ul style="list-style-type: none"> ✓ program level assessment tools: support for program assessment, curriculum planning, benchmark testing, student outcome tracking and instructional research – all aggregated data ✓ generate faculty-focused statistics (e.g. identifying instructor presence/activity, unevaluated assignments, discussion statistics, time since update of newflash, etc.) – to be used in accordance with campus and contractual policies
i) set release preferences for all course content	<ul style="list-style-type: none"> ✓ flexible design environment 		
j) maintain a long-term archive of courses and other student work with appropriate security and privacy safeguards	<ul style="list-style-type: none"> ✓ accurate, readily accessed historical records of courses and student work 		
k) ability for campuses to selectively delegate appropriate administrative tasks	<ul style="list-style-type: none"> ✓ individual programs efficiently implement necessary administrative tasks 		
l) ability for individual campuses to tailor the platform autonomously if so desired	<ul style="list-style-type: none"> ✓ campuses support and customize platform as desired 		
m) provide a development and staging area for new courses that is available independent of specific terms	<ul style="list-style-type: none"> ✓ campuses are able to develop numerous courses and programs simultaneously (in support of “large scale” programs) 		
n) provide online collaboration environments	<ul style="list-style-type: none"> ✓ effective and efficient support of non-course collaboration for a variety of faculty, staff, and student groups (committees, organizations) 	<ul style="list-style-type: none"> ✓ administrators can create online clubs, interest or study groups, and other communities 	<ul style="list-style-type: none"> ✓ availability of nonacademic, non-billable courses (as with MeetingSpace) to be used for student orientations, advising, training and administration, and student communities

Additional Features and Core Functionality		
Tool Type	Base Configurations of LMS	Core features identified by LE Task Force
Instructor tools	<ul style="list-style-type: none"> ✓ instructor can make private notes about the course ✓ instructors can save private drafts of evaluations 	
Discussion forums	<ul style="list-style-type: none"> ✓ Discussion can be viewed by date and thread ✓ Posts can include attachments and URLs ✓ Posts can be either plain text, formatted text, or HTML ✓ Instructors can determine the level of involvement(read, write, or post anonymously) for students ✓ Instructors can create discussion environments for small groups ✓ Discussion threads are expandable and collapsible to view an entire conversation on one screen ✓ Instructors can comment privately to individual students on each discussion post 	
Groupwork	<ul style="list-style-type: none"> ✓ instructors can assign students to groups ✓ each group can have its own shared group presentation folder and discussion folder 	
Authorization	<ul style="list-style-type: none"> ✓ Instructors can assign different levels of access to their course based on the following pre-defined roles: student, designer, tutor, and guest ✓ Instructors or students may be assigned different roles in different courses 	<ul style="list-style-type: none"> ✓ Ability to control whether or not faculty can add guests, based on campus guidelines
Gradebook	<ul style="list-style-type: none"> ✓ Instructors can add the grades for offline assignments to the online grade book ✓ Instructors can export a comma-delimited version of the grade book to an external spreadsheet program ✓ Instructors can manually edit all grades ✓ Instructors can delegate the responsibility for grading assignments. ✓ When an instructor adds an assignment to the course, the software automatically adds it to the online grade book ✓ Instructors are provided with a “permanent pen” feature which allows for easy font(?) and color-specific in-text annotation ✓ Instructors can provide extended narrative comments as well as letter grades ✓ Instructors can store completed evaluations privately, and release them at a later time ✓ Students and instructors can view the grades and narrative evaluations for all assignments in a separate evaluation section of the course site 	<ul style="list-style-type: none"> ✓ Ability to track student performance directly into the grade book ✓ Assessment of student activity documents synched with the grade book ✓ Ability to report based on a number of variables, both in tabular and graphic form ✓ No character limits on evaluation comments ✓ Ability to auto import pre-posted comments into the evaluation form

Tool Type	Base Configurations of LMS	Core features identified by LE Task Force
Course calendar	<ul style="list-style-type: none"> ✓ Instructors can post course-related events and announcements in the course calendar 	
Content sharing and reuse	<ul style="list-style-type: none"> ✓ Populated course templates (with instructor-generated content) can be cloned 	
Course organization	<ul style="list-style-type: none"> ✓ Instructors can create both linear and non-linear sequences using a content library ✓ Templates support organizing content and functionality by sequences of learning activities rather than system functionality (e.g., discussion board, file storage, etc.) 	<ul style="list-style-type: none"> ✓ Tools for data sorting to enable instructors to sort and display the course data and materials in a variety of ways
Rich text editor	<ul style="list-style-type: none"> ✓ Templates include a rich text content editor 	<ul style="list-style-type: none"> ✓ Ability to edit all course text, using robust editing tools
Instructional standards compliance	<ul style="list-style-type: none"> ✓ System supports IMS Content Packaging 1.1.2. ✓ The product provider will work with the institution to migrate existing courses into the system 	
Internal email	<ul style="list-style-type: none"> ✓ Students have email aliases that forward to external email accounts ✓ Faculty have internal email accounts with both webmail and thick client access 	<ul style="list-style-type: none"> ✓ Ability for students and instructors to send private messages to each other within the course, without the need for an external email account
File Exchange	<ul style="list-style-type: none"> ✓ Students can upload files to a shared group folder ✓ Students can submit assignments using drop boxes ✓ Students can submit assignments to a partner or a group of students ✓ Instructors can comment on files and return them to the student 	
Collaboration		<ul style="list-style-type: none"> ✓ Enhance engagement, learning and community through group interaction ✓ Ability to support a variety of approaches to teaching and learning, including learner center approaches
Faculty tools		<ul style="list-style-type: none"> ✓ Ability to automatically release learning content and activities based on preset criteria, such as date/time, student, etc.
Administrative tools		<ul style="list-style-type: none"> ✓ Ability to extract numeric or letter grades and text comments in a batch process that creates a flat file for downloading and processing by the campus ✓ Ability to archive courses on a course-by-course basis, as established by the campus ✓ Ability to grant and revoke access to a course both manually and via automatic batch process

APPENDIX III: SERVICE AND SUPPORT RECOMMENDATIONS

INTRODUCTION

The SUNY Learning Network provides services and support in addition to a learning management system. Although it is outside the charter of our current Task Force to address these services in detail, we believe strongly that they are critical competitive differentiators of the total SLN system. It is within this context that we offer the recommendations below.

GENERAL PROGRAM CONSIDERATIONS

- Campus budgets vary from year to year; therefore, SLN total cost of ownership must be competitive, effective, and predictable.
- SUNY is a large and diverse group with a variety of needs; consequently the evolution and growth of SLN's services and support must be based on community input and needs.

SLN PROFESSIONAL DEVELOPMENT PROGRAM

- Professional development programs ideally should be designed to meet the needs of participants for a variety of learning modalities and scheduling opportunities. SLN should provide campuses with continuum of professional development opportunities from which to choose – at a variety of times throughout the year – encompassing both online and on-site methods.
- Professional development is facilitated with effective, immediate communication. Furthermore, information, advice, and support are often best conveyed by skilled individuals on individual campuses. Individual SLN campuses should have the option of identifying existing faculty or staff members to become on-site trainers in order to more efficiently create and disseminate knowledge within the SLN community. This will also further promote self-reliance among faculty on individual SLN campuses in terms of benefiting from more immediate, as-needed training opportunities and from having more opportunities to share and grow a collective knowledge base. SLN should provide train-the-trainer options for these campuses.

KNOWLEDGE BASE

- The size and diversity within the SUNY system provides a unique opportunity to grow a pool of knowledge about web-based teaching and learning. Furthermore, faculty and students benefit from sharing content and effective practices. SLN should therefore continue to support and enhance its ability to systematically confirm and formalize resources and knowledge through a program of research and dissemination.

TECHNOLOGY DEVELOPMENT AND SUPPORT

- Products and processes related to educational technology are constantly changing and improving. SLN should therefore plan regular and focused improvements to its technology platform and services with the goal of maintaining status as a compelling choice for the campuses.
- When it comes to professional development, faculty respond best to knowledgeable, credible colleagues. Faculty also want and need just-in-time *support* as well as *training*. SLN should encourage the appointment of individuals with established teaching experience, as well as expertise in instructional design and online pedagogies, to serve in the role of the Multimedia Instructional Designer (MID).
- The management of campus SLN activities is time consuming and unpredictable; SLN should therefore advocate for the role of Academic Coordinators on member campuses.
- Online faculty and students should be focused on teaching and learning rather than technology. Furthermore, it is neither cost effective nor likely that individual campuses can support their own individual Help Desks. Consequently, SLN should continue to provide and grow Help Desk services for all campuses.
- It is neither cost effective nor likely that individual campuses can support course archiving and back-up functions. SLN should continue to maintain a thorough and reliable archiving and back-up operation.

COMMUNICATIONS

- Customer service is a critical feature of the total SLN package. LE should focus on timely responses and clear communication with all stakeholders. This includes collecting input as well as prioritizing and implementing enhancements to all SLN services and support in a timely manner.
- An organization's Internet presence is highly influential in shaping individual's predisposition towards and expectations of that organization. In particular, a higher-education DE network such as SLN should present a state-of-the-art, best-in-class website. SLN should therefore extensively revise its current website in terms of content (currency, accuracy, functioning links), appearance, and organization/usability.
- The ability to observe a course has the potential for significant impact on prospective students, prospective faculty, and others. SLN should offer a range of "example courses" on its site from a variety disciplines and exhibiting a range of approaches.

APPENDIX IV: TASK FORCE MEMBERS

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