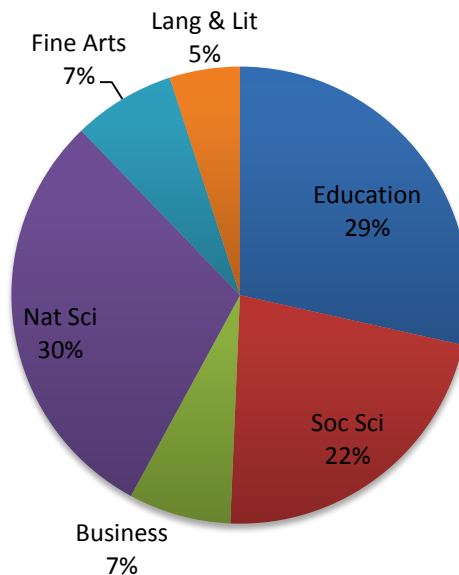


Current Environment (Fall Semester 2010)

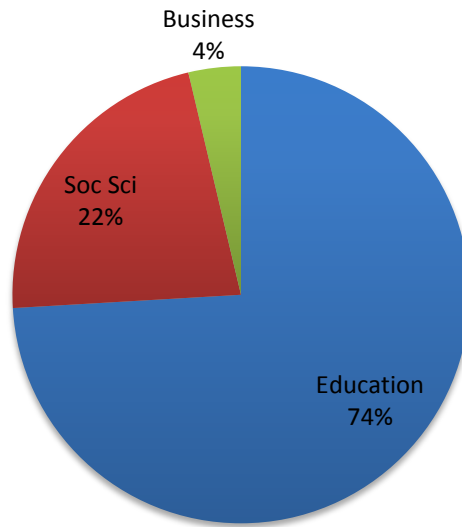
Three separate Learning Management Systems installed at Concord:

- Two Moodle V1.99 servers with approximately 60 course sections
 - Biology department server: 15 course sections
 - Division of Natural Sciences server: approximately 45 course sections
- One Blackboard CE V8 application server and one database server with 161 course sections (including 27 completely asynchronous/fully online and 9 hybrid web; not including UNIV 100 classes)
 - Division of Education and Human Performance: 63 course sections (20 asynchronous; 8 hybrid)
 - Division of Social Sciences: 49 course sections (6 asynchronous)
 - Division of Business: 16 course sections (1 asynchronous; 1 hybrid)
 - Division of Fine Arts: 16 course sections
 - Division of Languages and Literature: 11 course sections
 - Division of Natural Sciences: 6 course sections

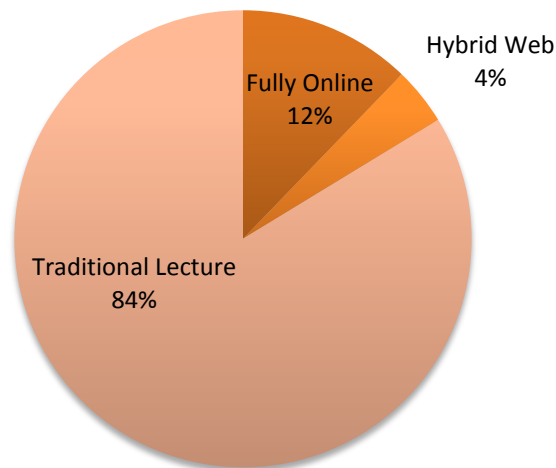
All LMS Courses By Division



Fully Online LMS Courses By Division



All LMS Courses By Type



Learning Management System Evaluation

Blackboard Student Usage (not including UNIV 100):

- 3,528 student enrollments in 161 course sections by 2,059 unique students
- 470 student enrollments in 27 fully online sections by 377 unique students
- Total student online activity at eight weeks:
 - Asynchronous classes:
 - Range: 01:47:27 to 16:11:39 per course (approx. 13 ½ minutes to 2 hours 2 ½ minutes per week)
 - Mean: 06:26:41 (approx. 48 minutes per week)
 - All other classes:
 - Range: 00:00:32 to 16:29:32 per course (approx. ½ minute to 2 hours 3 ½ minutes per week)
 - Mean: 01:23:34 (approx. 10 ½ minutes per week)

Current support environment:

- Moodle:
 - Software: open source product, free download
 - Security: ad hoc
 - Backup: ad hoc
 - Programmer: part time faculty (Jim Johnston, David Hill)
 - Administrator: part time faculty (Jim Johnston, Darla Wise)
 - Help Desk: no
 - Course creation: by instructor
 - Student enrollment: by instructor, batch enrollment implemented
 - Integrated in MyCU/Active Directory: no, requires separate student login
- Blackboard:
 - Software: CE Basic License for 6000 seats: \$18,890 annually (10% OARNET discount, list price \$21,100), expires June 30, 2011 (product end of life 2013?)
 - Security: Technology Services
 - Backup: Technology Services
 - Programmer: part time Technology Services (Steve Meadows)
 - Administrator: full time Technology Services (Katherine Shook)
 - Help Desk: yes
 - Course creation: by instructor and administrator
 - Student enrollment: global data base by administrator, course roster by instructor, batch enrollment not implemented
 - Integrated in MyCU/Active Directory: partial (link available), requires separate student login

Learning Management System Evaluation

Functionality Used:

FUNCTION	BLACKBOARD	MOODLE
Announcements	X	X
Assessments	X – Use rubrics, use lockdown browser, user Respondus	X – Use molecular editor, use numerical notation editor
Assignments	X – Use with grading rubric	X
Calendar	X	X
Chat	X – Use Who’s Online	X
Course Content	X – Use I-clickers	X
Discussions	X	X
Grade Book	X – Use export to Excel	X
Grading Forms	X	X
Group Manager	X	
Learning Modules	X	X
Mail	X	
Selective Release	X	X
Syllabus	X – Upload file	X – Upload file
Tracking	X	X
Video Links	X	X
Web Links	X	X

Choices Going Forward

1. Migrate to Blackboard Learn V9
2. Migrate to Moodle V2
3. Migrate to Moodle V2 and Blackboard Learn V9

Learning Management System Evaluation

Option 1: Migrate to Blackboard Learn V9

	Benefits	Challenges
Cost	<ul style="list-style-type: none"> No additional Technology Services staff required 	<ul style="list-style-type: none"> Bb Learn Enterprise Foundation for course delivery release 9 with managed hosting (FTE 2,000 - 3,000): Year 1 - \$44,900, Year 2 - \$49,200, Year 3 - \$54,000 Bb Learn Enterprise for course delivery release 9 self hosted (FTE 2,000 - 4,000): Year 1 - \$29,300, Year 2 - \$39,100, Year 3 - \$46,500 Bb Learn Course Delivery SIS Integration - \$20,120 Integration and Customization Maintenance (ICM) – Year 1 - \$4,000, Year 2 \$6,000, Year 3 \$8,000
Function	<ul style="list-style-type: none"> Functionally equivalent or better than current Blackboard environment E-portfolio support included 	<ul style="list-style-type: none"> Does not provide equivalent molecular editor or numerical notation editor Gradebook function not well liked Functional extensions either need to be purchased from third party or wait for possible inclusion in next product version; Generally long development cycles Frequent JAVA/browser issues and new browsers not supported quickly

Learning Management System Evaluation

	Benefits	Challenges
Support	<ul style="list-style-type: none"> • Single LMS for Help Desk to support and students to use • Can be supported by existing Technology Services staff; potential for staff reassignment/reduction if managed-hosting is purchased • Eliminates ad hoc security and backup concerns with current Moodle installation • Vendor support included with product purchase • LMS bugs may be fixed by vendor • Blackboard 8 product expiration not an issue 	<ul style="list-style-type: none"> • LMS bugs cannot be fixed by Technology Services
Migration	<ul style="list-style-type: none"> • Smooth migration path from Blackboard CE 8 for approximately 2/3 of existing LMS courses 	<ul style="list-style-type: none"> • No migration provided for Moodle to Blackboard 9; 1/3 of existing LMS courses will need to be manually recreated

Learning Management System Evaluation

Option 2: Migrate to Moodle V2

	Benefits	Challenges
Cost	<ul style="list-style-type: none"> • No software cost 	<ul style="list-style-type: none"> • Need Technology Services staff reassignment/retraining
Function	<ul style="list-style-type: none"> • Functionally equivalent or better than current Blackboard environment • E-portfolio plug-ins available • Plug-ins available for molecular editor and numerical notation editor • Many functional extensions available for free from open source developers • Gradebook improvements planned; development cycles generally shorter for open source software • No JAVA so browser issues rare and can potentially be fixed on site with access to open source code 	<ul style="list-style-type: none"> • Gradebook function not well liked • Functional extensions not necessarily integrated in product so additional staff labor occasionally required to research, download, install and configure.
Support	<ul style="list-style-type: none"> • Single LMS for Help Desk to support and students to use • Can be supported by existing Technology Services staff • Eliminates ad hoc security and backup concerns with current Moodle installation 	<ul style="list-style-type: none"> • No vendor support so additional debugging, research, and upgrading Technology Services will be required on occasion • Services upgrades tend to be more frequent for open source software • Technology Services staff development may be needed (e.g. for additional PHP programming support) • Product license extension for Blackboard 8 to continue through both summer sessions needs to be negotiated.

Learning Management System Evaluation

	Benefits	Challenges
Migration	<ul style="list-style-type: none">• Migration procedures documented and available from other developers	<ul style="list-style-type: none">• Migration from Blackboard CE 8 to Moodle for 2/3 of existing courses not completely automated; will require Technology Services assistance and/or opportunity for instructor redesign• Assessments pose particular migration challenge (suggestions from open source community exist but have not yet been tested here)• Division of Education indicated that as they were paid for initial development of asynchronous courses, migration of these courses to Moodle would be viewed as an extra duty subject to supplemental compensation

Learning Management System Evaluation

Option 3: Migrate to Moodle V2 and Blackboard V9

	Benefits	Challenges
Cost		<ul style="list-style-type: none"> • Requires same software cost as Option 1 • Requires same staff investment as Option 2
Function	<ul style="list-style-type: none"> • Both LMS are functionally equivalent or better than current Blackboard environment • Both LMS will support E-portfolio • Molecular editor and numerical notation editor support provided in Moodle. 	<ul style="list-style-type: none"> • Gradebook function not well liked in either LMS • Does not eliminate challenges for each LMS listed in options 1 and 2 • Students may end up using different LMS for different courses
Support	<ul style="list-style-type: none"> • Single Help Desk for faculty and students for both LMS • Eliminates ad hoc security and backup concerns with current Moodle installation • Blackboard 8 product expiration not an issue 	<ul style="list-style-type: none"> • Technology Services must support multiple systems; requires additional/retraining staff
Migration	<ul style="list-style-type: none"> • No migration required 	