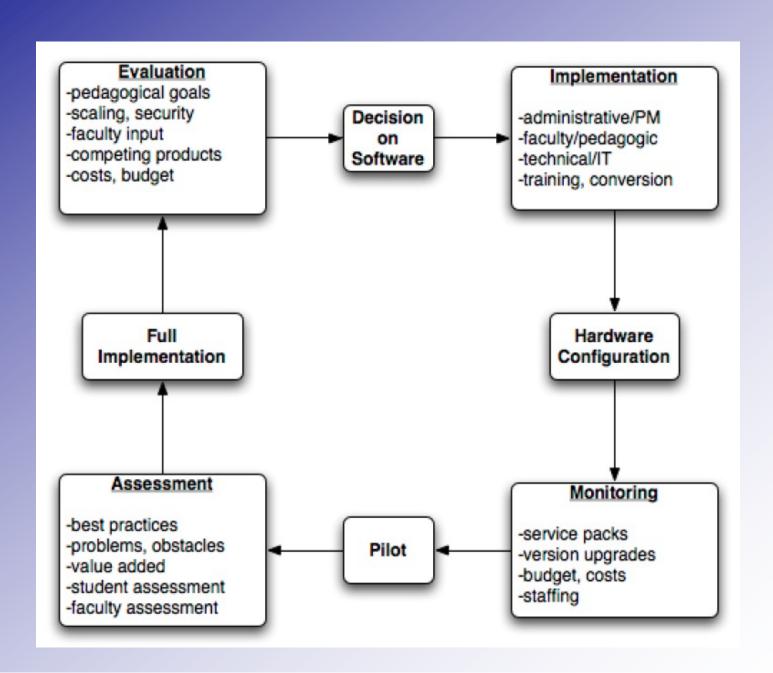
#### **Moodle: from Politics to Policies**

#### My hope:

- (i) use CMS to augment between-class activities (such as discussion boards, group projects);
- (ii) use CMS to organize course materials (eg warehouse course handouts) and provide for on-line quiz capabilities, etc.
- (iii) on that basis move to 4 credit courses both as an incentive to use the CMS and to solve the 4-4 teaching load problem.
- System view:
- (i) They felt obliged to move to what is now Vista from WebCT –
   CE (campus edition) because WebCT would desupport;
- (ii) Main Vista selling point was the reuse of modules, which faculty would supposedly use (no survey ever done).

### What I hoped for



### **Sponsors Executive Committee**

- CSU consists of four constituent universities, of which CCSU is one of the two largest, along with a system office, which has grown from 10 to over 100 staff since it moved off campus to downtown Hartford, mainly through increase in IT staff (more at the system office at the time than at CCSU).
- The SEC consisted of the Vice-chancellor of the system as chair, a dean from one campus as vice -chair, two representatives from each university (one faculty, one admin), and system office staff (acting CIO, exec. officer for IT, program director, assoc. exec. officer for PM, and a project manager specifically for this project), for a total of at least a dozen persons at each meeting, supplemented by system IT staff for presentations, leading to meetings of 15 or more.
- This committee met for almost two years, first to determine a provider (ultimately CCSU), then to supervise implementation.

# Positions (1)

#### System Office

- Centralization of IT for supposed economies of scale
- Safety blanket of enterprise software
- Security, scaling, support for product
- Shareable Modules, reusable content
- Follow the vendor and take no risks
- Some other faculty and campus administrators
  - "Hybrid courses" online replaces some/many/most of onground classes
  - Support for only one CMS package.

# **Motivations and Critiques (2)**

#### Yours Truly

- Web-enhancement of on-ground courses as priority
- Warehousing of material, ease of navigation, overview
- Between class activities discussion groups, projects
- Pilot project only for hybrid/blended courses
- Extra credit for faculty and students for web-enhancement

#### Other Critiques

- "Wrong software" need portfolio package
- Imposes arbitrary costs on campuses
- Not fully thought out in terms of academic uses
- Technology in control of pedagogy

# **Different Types of Courses**

| Definition  | Comment  |
|---|--|
| Class which meets for 15 hours per load credit in a classroom, according to contractual standards.  | Traditional mode of "in-class" instruction: "contact hour" is actual face to face presence and interaction.  |
| A traditional class where some or<br>all of the class material is available<br>on-line, for use by students between<br>classes, either for reference or for<br>interaction. | WebCT replaces ad-hoc instructor created course-specific web-sites using html markup and editors. Students can engage in "between-class" exchanges through internal email, discussion groups and chat lines. Faculty who develop web-enhanced courses tend to use technology enhancements in class as well, to explain online components, present archived documents, and undertake web searches. Office hours may be held online as well. |
| A course which meets initially, or<br>intermittently in-class; at other<br>times, it meets exclusively on-line  | To the best of my knowledge, we haven't had any such courses to date, and it is precisely the hybrid nature of the class which poses problems  |
| A course which never meets on-<br>ground.   | OnLineCSU courses pioneered this mode.   |
|   | Class which meets for 15 hours per load credit in a classroom, according to contractual standards.  A traditional class where some or all of the class material is available on-line, for use by students between classes, either for reference or for interaction.  A course which meets initially, or intermittently in-class; at other times, it meets exclusively on-line  A course which never meets on-                              |

#### Costs

- Overall cost of the project, when finally budget figures were made available at my insistence, was about \$3.7 million, exclusive of services of conscripted staff at CCSU.
- The SO hired 5 staff (DBAs, network administrators) to manage what ultimately became Vista, at cost (estimated) of \$500,000 per year.
- Vista contract is "in perpetuity" but requires yearly maintenance fee (AKA, annual fee).

### From Dissatisfaction to Critiques

- Over the course of the two year SEC I wrote four critiques, arguing against the notion that centralisation of IT would lead, in this case of academic software, to economies of scale, and criticizing the automatic adoption of whatever Vista, and ultimately Blackboard offered.
- Critique of Blackboard as monopolistic, predatory company, serving profits not people.
- Needless to say, I was in a minority, but I remained on the committee with a couple of allies to continue a rearguard action, hoping for a better day.
- This arrived, in part, when the Chancellor retired and was replaced by a university-level president opposed to centralisation of IT, but this was independent of any critiques at SEC.

#### **Enter Moodle**

- Disatisfied with the SEC implementation, disgusted by BlackBoard's behavior, I did a simple google search for Course Management Software, and immediately found Moodle and Sakai.
- With the aid of a colleague (for folder permissions), and some fussing until I found an OS-X package for Mysql (Marc Liyanage's was the only one several years ago), I set up Moodle on my Mac Powerbook. It worked! and had pretty well everything that Vista had, if not more, with an easier implementation (including backup), user-control, plus it was free!
- Mysql and php as we now know, is a dynamite combination for open-source software – eg Drupal, Wordpress, MediaWiki, etc.

#### **Peaceful Coexistence**

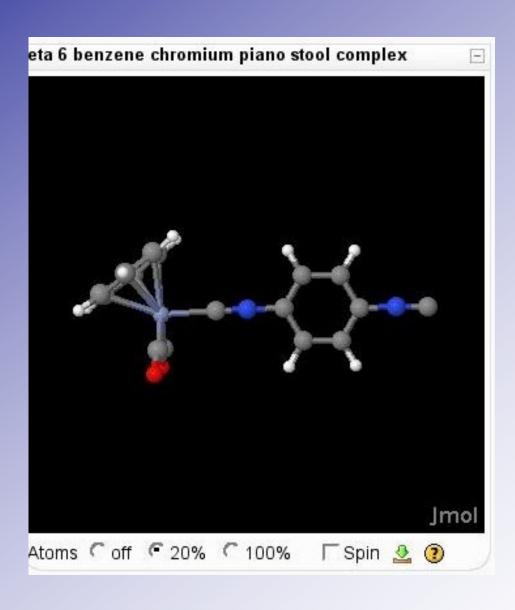
- System-wide, multi-campus enteprise software (eg SCT Banner) admin. only, one package only
- Commercial desk-top software, usual suspects (eg Microsoft Office, Adobe products;
- Special purpose des
- k-top commercial software (eg Filemaker Pro for databases, Wordperfect)
- Open source, php/mysql or Java packages (eg Moodle, Drupal, Sakai, OpenOffice, etc.)

### Dr. Thomas R. Burkholder

#### **Moodle at CCSU**

- Fall 2007 Moodle Trial
- Overview of Moodle Usage
- Issues
- Results of Student Survey
- Future directions

## **Jmol Filter Example**



## **Moodle Trial Setup**

- Server Specifications
  - 3.0GHz Dual Xeon
  - 4GB RAM
  - 2X160 GB SATA
  - \$2544.32 (DELL)
  - Ubuntu or Debian 64 bit OS
  - Apache/MySQL/PHP

- Actual Server (virtual)
  - 2.33 GHz dual Xeon
  - 1GB RAM
  - SAN allocation of 150 GB
  - CentOS 4.5 (64 bit)
  - Apache 2.0.52
  - MySQL 4.1.20
  - PHP 4.3.9

#### Software

- Moodle
  - 1.8.1 initially
  - 1.8.4 currently
- Language Packs
  - Polish
  - Spanish
  - French

- Added Libraries
  - php-gd
  - php-mbstring
- Filters
  - Jmol
  - Algebra notation

## Fall 2007 Summary

- 36 Courses
  - Art
  - Chemistry
  - English
  - History
  - Modern Languages
  - Honors
  - Philosophy
  - Technology Education

- 13 Faculty
  - Most in History and English
- 650 Students

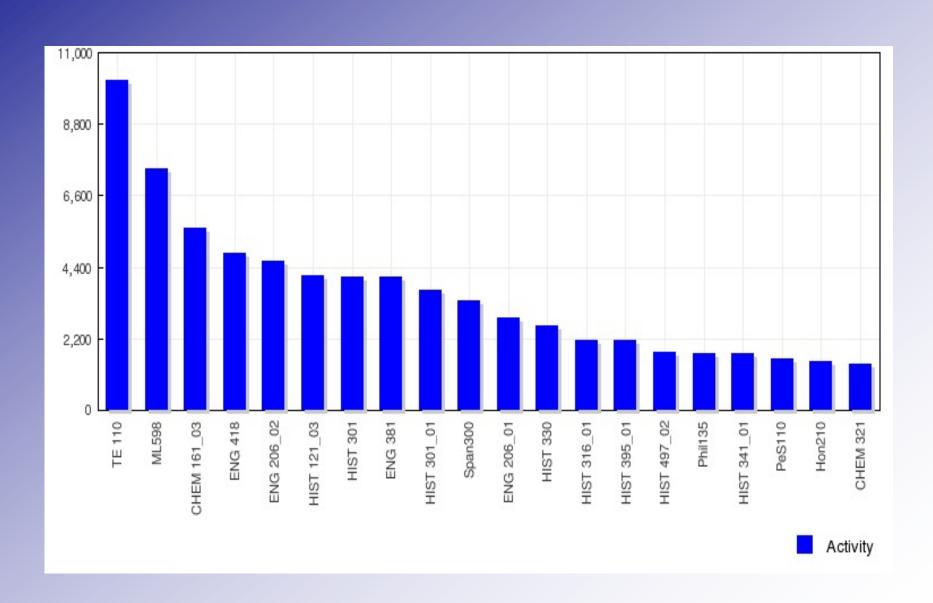
# **Teaching with Moodle**

- Moodle 101
- Forum for Problems and Resources
- All Instructors enrolled in forum.
- Feedback for administrators
- Community help

#### Issues

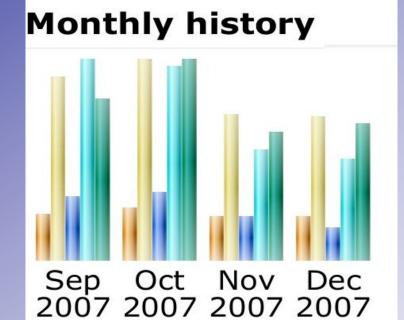
- Filtering of Registration Confirmation emails
- Student confusion about "surname" field
- Manual enrollment
- Single sign-on
- Duplicating courses
- Course requests
- Grade Book
- Quizzes

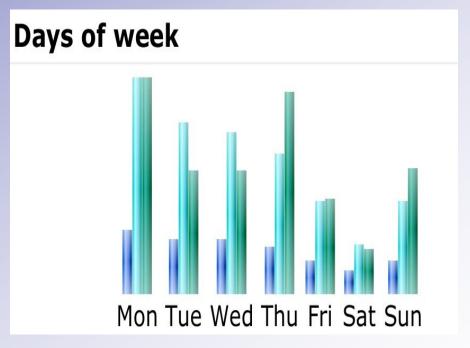
# **20 Most Active Courses**Fall 2007



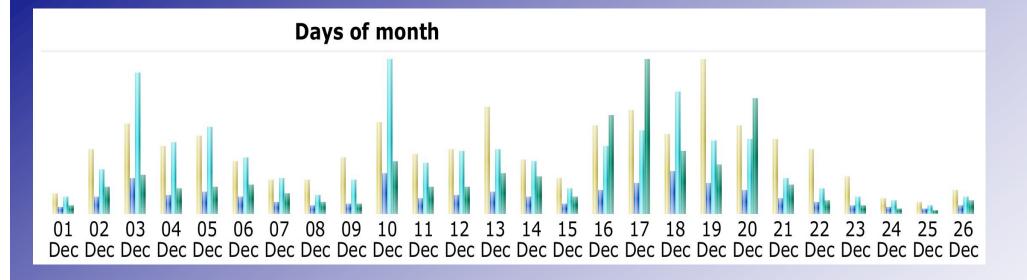
# Fall 2007 Moodle Usage

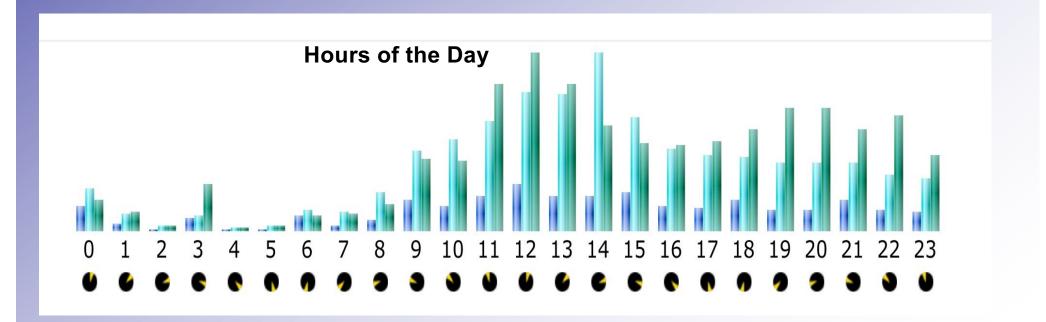
| Month    | Unique visitors | Number of visits | Pages  | Hits    | Bandwidth |
|----------|-----------------|------------------|--------|---------|-----------|
| Sep 2007 | 1606            | 6488             | 154460 | 482434  | 4.66 GB   |
| Oct 2007 | 1835            | 7107             | 162188 | 471235  | 5.82 GB   |
| Nov 2007 | 1523            | 5201             | 106993 | 267568  | 3.74 GB   |
| Dec 2007 | 1502            | 5084             | 80239  | 244122  | 3.97 GB   |
| Total    | 6466            | 23880            | 503880 | 1465359 | 18.19 GB  |





#### **December 2007 Moodle**

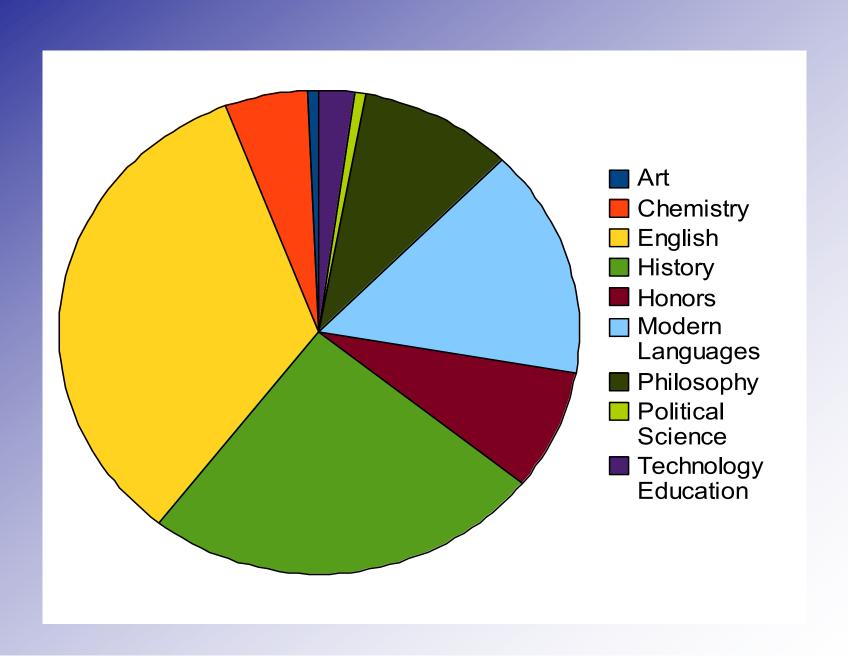




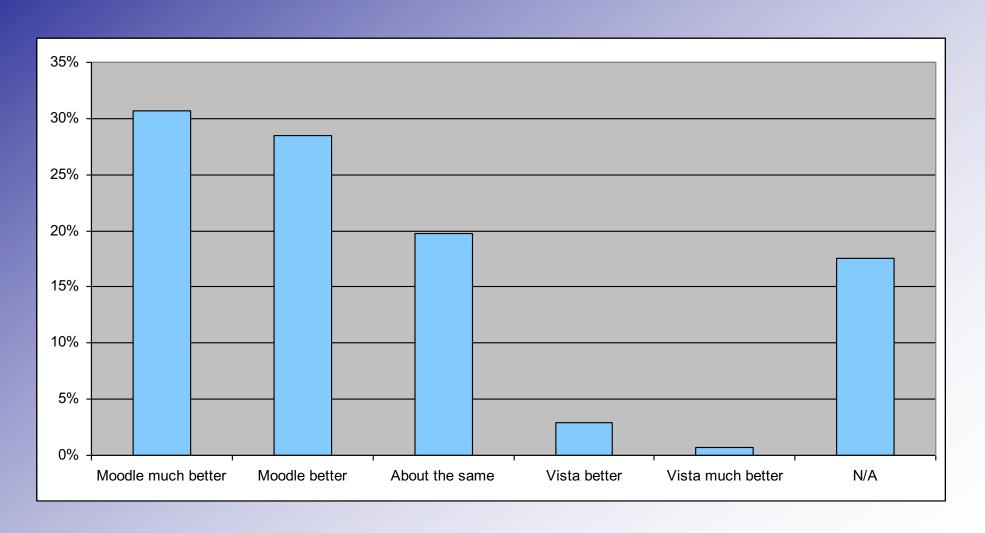
# **Survey Method**

- Survey Monkey
  - Department level information collected
  - Experience level assessed
  - General comparison to Vista if applicable
  - 5 point Likert scale for features and assignments
  - Willingness to use Moodle in future
  - Optional comments collected

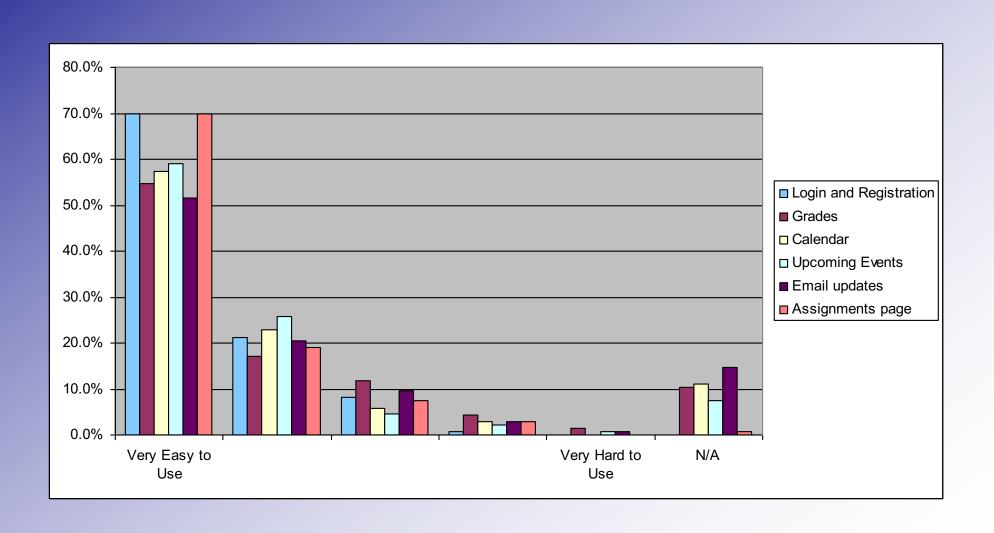
# **Student Response by Department**



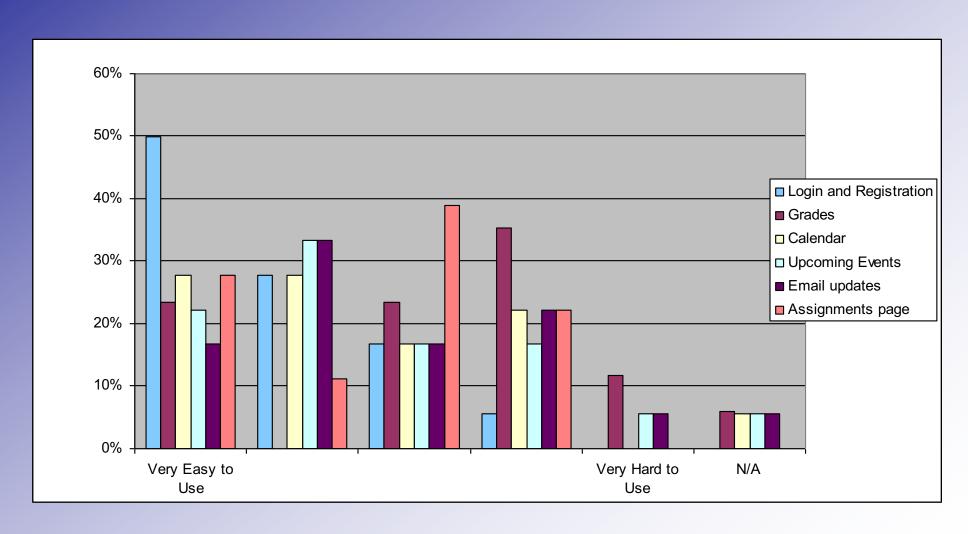
# Compare Moodle to Vista in general.



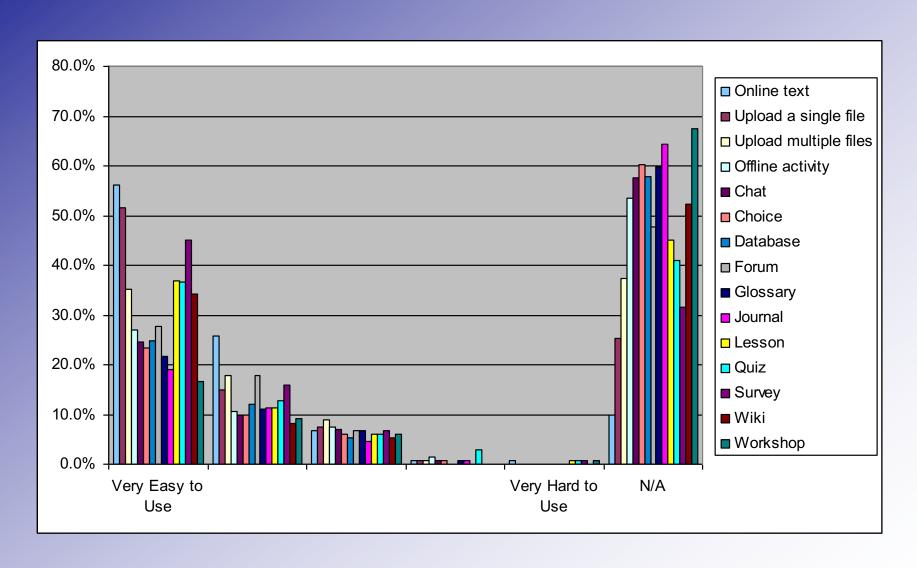
# Ratings of Moodle Features All Students



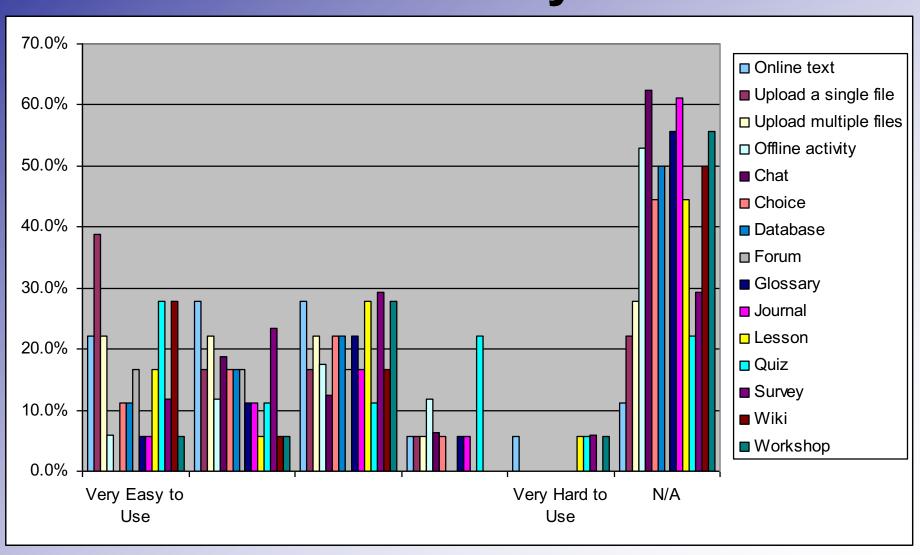
# Ratings of Moodle Features by students who rated any Moodle Features Hard or Very Hard to Use



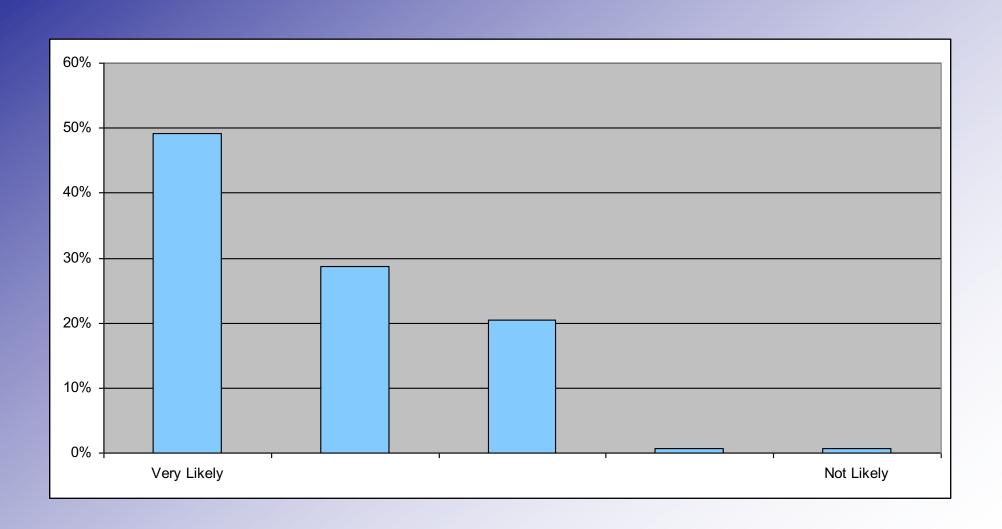
# Ratings of Moodle Assignments All Students



# Ratings of Moodle Assignments by students who rated any Moodle Features Hard or Very Hard to Use



# Willingness to use Moodle in the Future



#### **Future**

- Add different disciplines
  - Math and some other sciences
  - Geography, Sociology etc.
  - Business and School of Education
- Tie into CCSU single sign on
- Automatic enrollment of students in courses from registrar info.
- Upgrade to Moodle 1.9 for Fall 2008