

Track 3

Setting a Next-Generation CMS Strategy

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Learning **L T C** Technology Consortium

A collaborative of nine universities with common interests and challenges in the area of teaching and learning with technology

- **Indiana University** ● **University of Delaware**
- **University of Florida** ● **University of Georgia**
 - **University of North Carolina**
 - **University of Notre Dame**
- **University of Pittsburgh** ● **Virginia Tech**
 - **Wake Forest University**

www.learningtechnologyconsortium.org

CMS Adoption

University of Pittsburgh, AY 1998

University of North Carolina, AY 1999

Virginia Tech, AY 2000



University of Notre Dame, AY 1997

University of Georgia, AY 1998



Indiana University, AY 1998



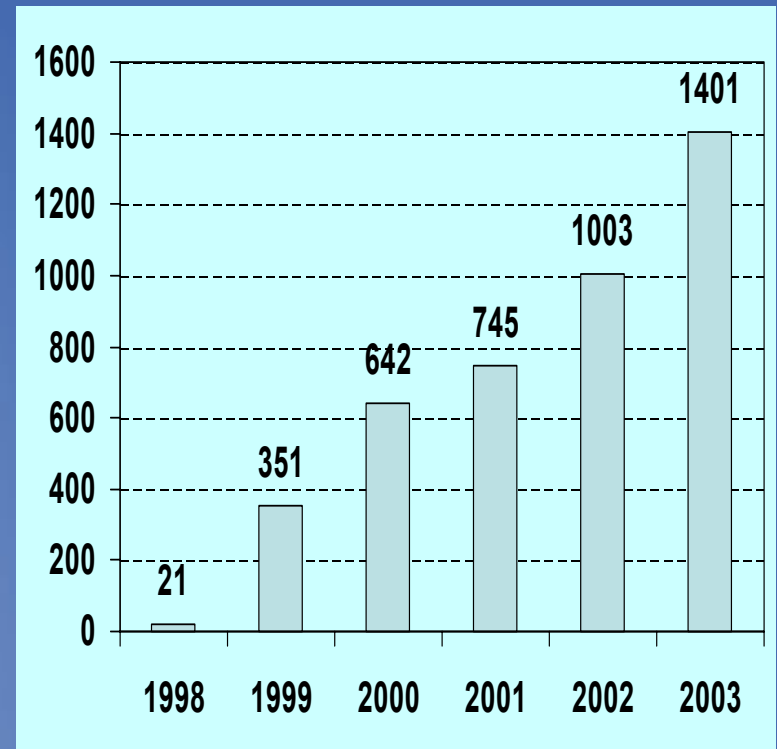
Current Environment

	Students	Faculty
University of Pittsburgh	67%	41%
University of Georgia	90%	60%
University of Notre Dame	95%	25%
Virginia Tech	95%	85%
University of North Carolina	84%	56%
Indiana University	79%	72%

Blackboard at Pitt

- ❖ Over 3,200 unique courses have been developed in Blackboard
- ❖ 67% of Pitt's 33,804 students are using Blackboard this fall
- ❖ Blackboard adoption has grown an average of 40% annually from 2000 through 2003

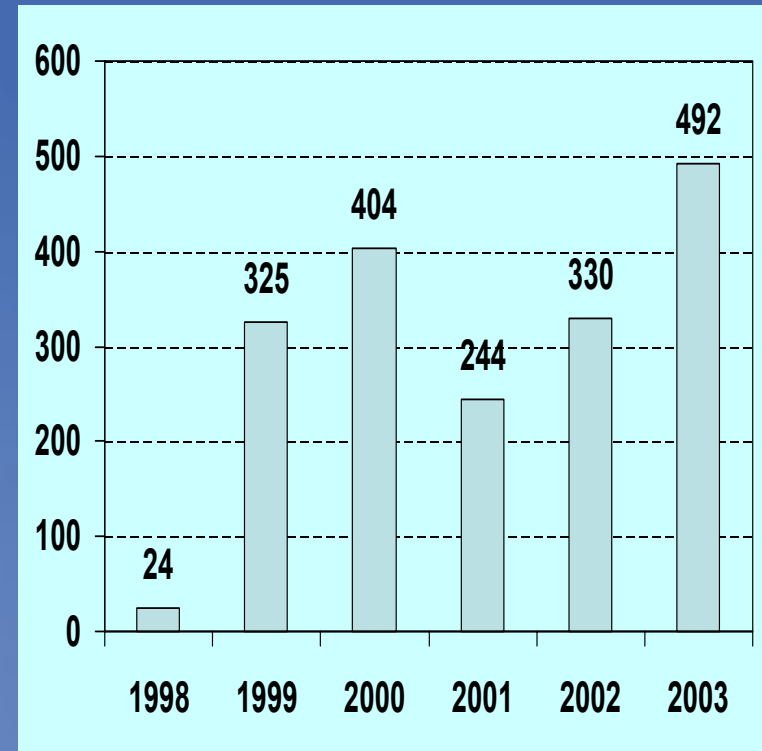
Fall Term Sections Using Blackboard



Training and Support

- ❖ Training Options
 - ◆ Summer Institute (4 days)
 - ◆ Novice (12 hours; extensive hands-on)
 - ◆ Standard (8 hours; some hands-on)
 - ◆ Expert (1-2 hours; no hands-on)
 - ◆ On-line (1-hour intro; self-instructional)
- ❖ Over 1,800 Pitt faculty have taken core Blackboard training (required)

Faculty Trained in Blackboard



Agenda

❖ The Issues:

- ◆ **Goals and Objectives** - University of Georgia
- ◆ **CMS Selection** - University of Notre Dame
- ◆ **Cost Analysis** - Virginia Tech
- ◆ **Vendor Issues** - University of North Carolina
- ◆ **Open Source Option** - Indiana University

❖ Summary: Where Do We Go From Here?



CMS Goals and Objectives

William K. Jackson

University of Georgia



WebCT at Georgia

- ❖ Early adopter of WebCT (AY 1998)
- ❖ 33,000 students (90%) using WebCT
- ❖ Current level of CMS use: 3,800 course sections and more than 1,200 instructors (60%)
- ❖ Nature of faculty support: centralized for supplemental use, decentralized for support of distance education



In the Beginning

Our goals were modest



In the Beginning

- ❖ We wanted to provide an alternative to the plethora of instructional Web sites being developed by individuals.
- ❖ We wanted to create a common interface for students as they moved across courses.



In the Beginning

- ❖ We wanted to simplify support requirements for web-enhanced courses.
- ❖ We wanted to provide a platform for web-based distance education.



In the Beginning

And,

- ❖ We wanted to accomplish these goals at a price we could afford.



Now That We Have “Succeeded”

- ❖ We must provide CMS reliability & support equal to that of other basic services.
- ❖ We must provide a CMS that incorporates rich media, multiple learning objects, digital library resources, and a variety of student transactions.



Now That We Have “Succeeded”

- ❖ We must provide a CMS that supports new options for anytime/anywhere access including tablet PC's, PDA's, and web-enabled cell phones.
- ❖ We must provide a CMS that supports branding and other program-specific requirements.



Now That We Have “Succeeded”

- ❖ We must accomplish this at a cost we can afford!!



CMS Selection Process

Tom Laughner

University of Notre Dame



Background

- ❖ WebCT introduced in 1997
- ❖ 25% of faculty and 95% of students
- ❖ Vista announcement in 2003



Fundamental Questions

- ❖ Should Notre Dame have a course management system?
- ❖ What is the best course management system for Notre Dame?
- ❖ Should the course management system be hosted on or off campus?



Philosophy

- ❖ Must be faculty driven process
- ❖ Student involvement
- ❖ Budget, infrastructure, technical specifications



Considerations

- ❖ Faculty requirements
- ❖ Student input
- ❖ Ease of use and intuitiveness
- ❖ Conversion
- ❖ Technical Integration/standards
- ❖ Vendor viability
- ❖ Support
- ❖ Training



Products

- ❖ Angel
- ❖ Blackboard 6.0
- ❖ eCollege
- ❖ WebCT Campus Edition 4.0
- ❖ WebCT Vista



Phases

1. Information gathering
2. Product demos
3. Faculty hands-on evaluations
4. Student hands-on evaluations
5. Projects and Planning
6. RFP



Outreach

- ❖ Web site – <http://oit.nd.edu/cms>
- ❖ Article in student paper
- ❖ Electronic mail to all faculty (very limited) and current CMS users (more frequent)



Cost Analysis

Tom Head

Virginia Tech

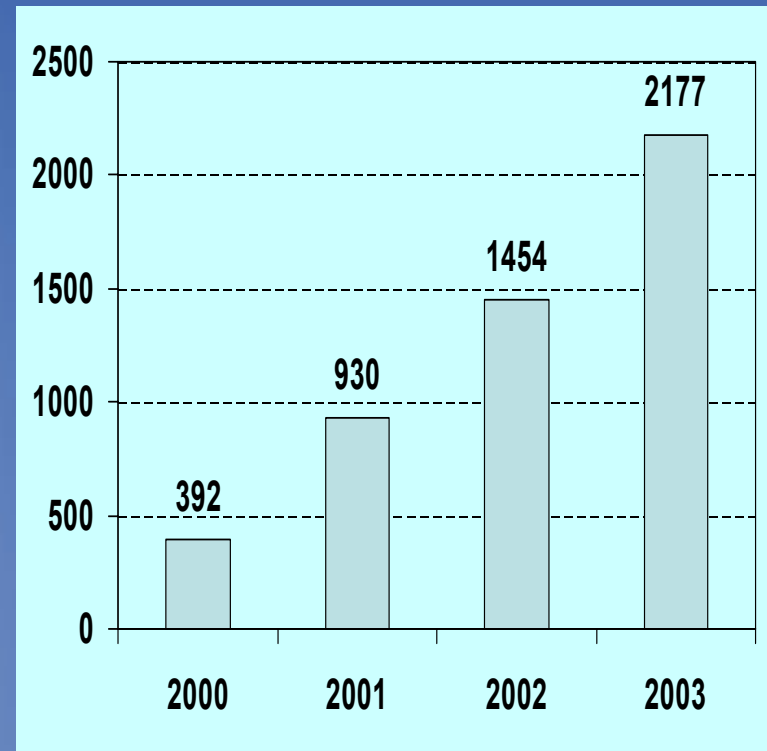


Blackboard at Virginia Tech

❖ Fall Semester 2003 Usage

- ◆ 1,590 courses
- ◆ 1,150 faculty (85%)
- ◆ 25,215 students (95%)

Blackboard Sections by Academic Year

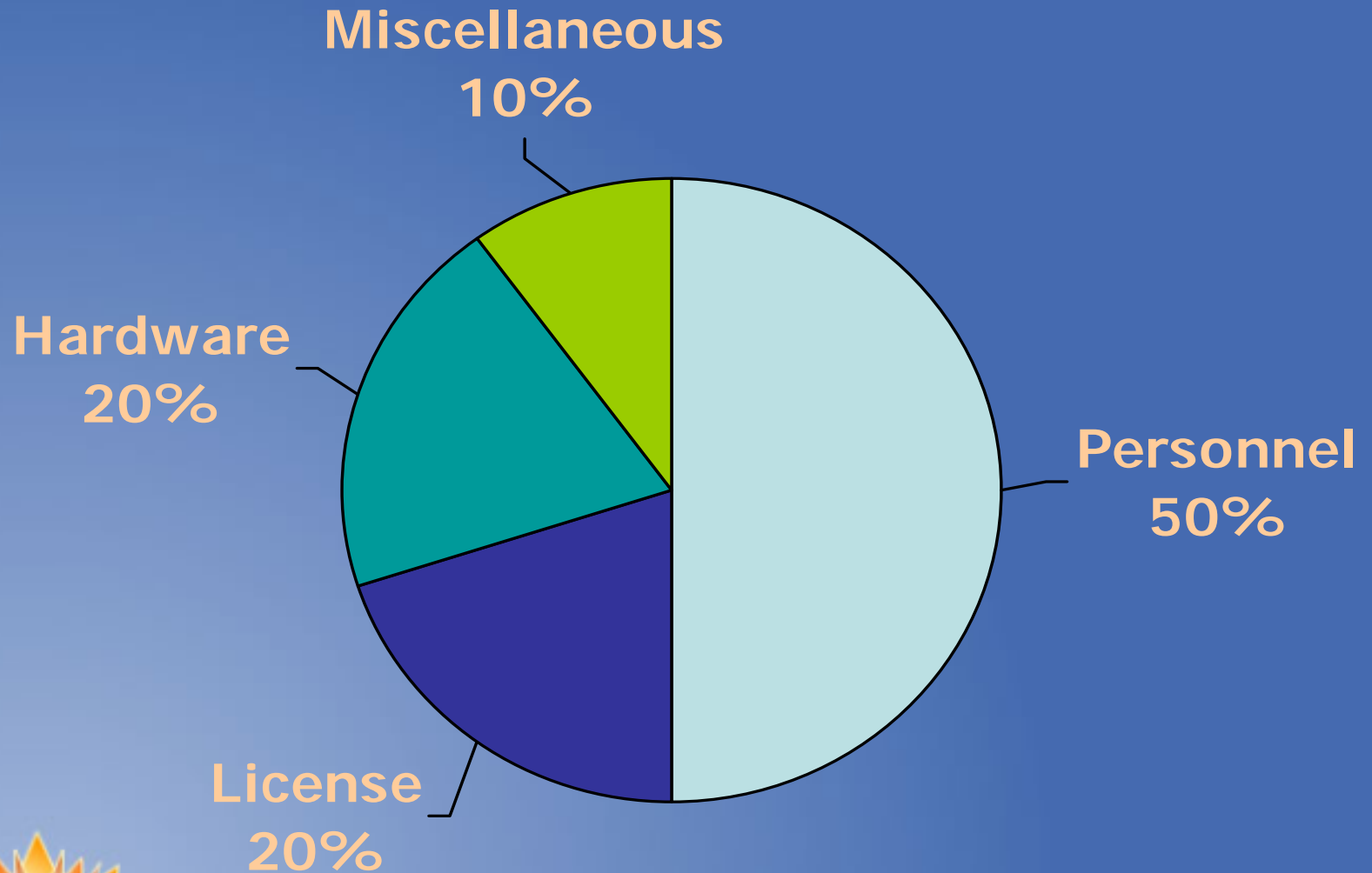


CMS Costs

- ❖ Personnel (Help Desk/Technical)
- ❖ License Fees
- ❖ Equipment Amortization
- ❖ Network Connectivity, Space & Overhead

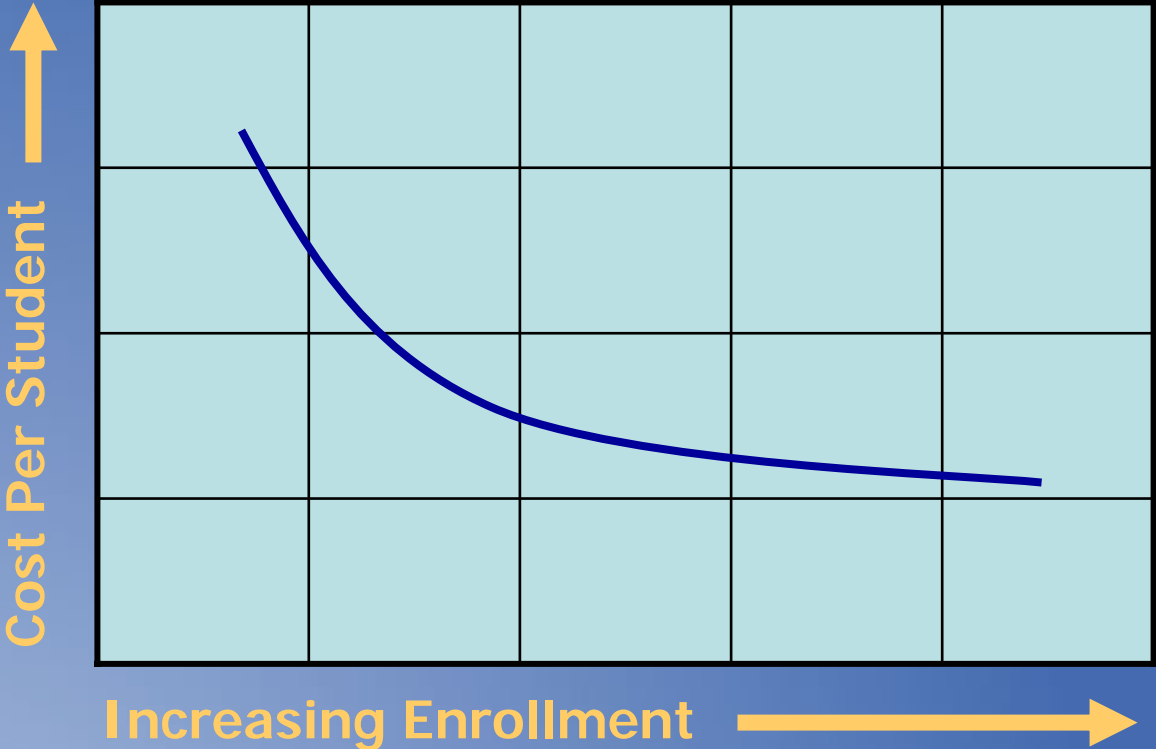


CMS Costs



CMS Cost Per Student

Costs Per Student Decrease with Increasing Enrollment



CMS Faculty Costs

- ❖ Faculty Training
- ❖ Course development by faculty
- ❖ Training and development costs must be balanced by increased productivity a CMS provides for faculty



Vendor Issues

Kathleen Thomas

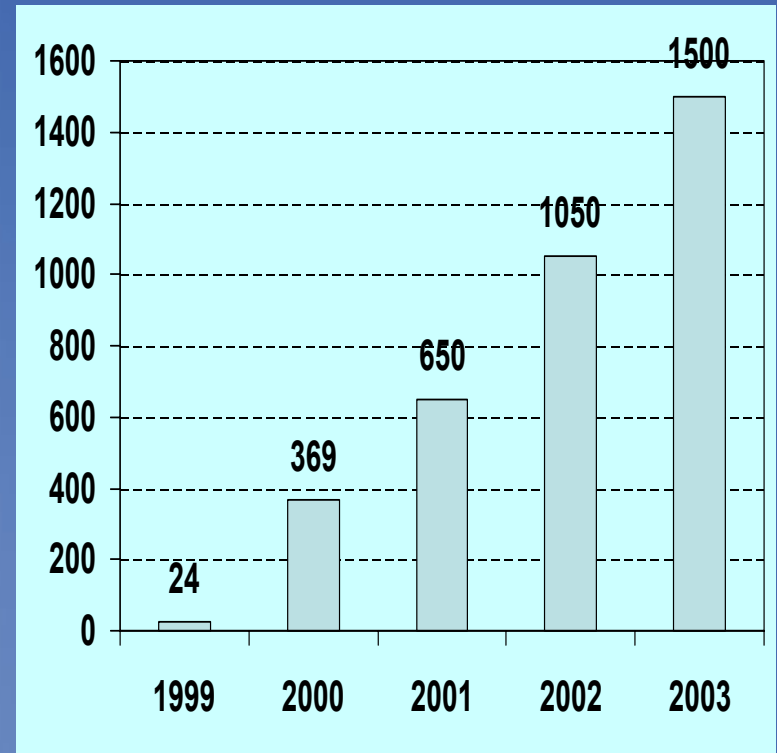
University of North Carolina at
Chapel Hill



Blackboard at UNC

- ❖ 1,575 Course Sections
- ❖ 1,690 Faculty (56%)
- ❖ 21,951 Students (84%)

Fall Term Sections Using Blackboard



Growing Pains

- ❖ Expanding client base
- ❖ Expectation that the systems perform many functions
 - ◆ Difficult for vendor to stress test entire system
 - ◆ Clients seem to be the testers
 - ◆ Testing, tracking down, and describing problems to the vendor
 - ◆ Find work-arounds for problems



Vendor Support

- ❖ Perception that vendors are less responsive
- ❖ We encourage faculty to send comments directly to Blackboard
- ❖ Vendor may want access to production systems and data
 - ◆ Has a direct bearing on support



Healthy Relationship

- ❖ Must be willing to commit resources to the relationship with the vendor
 - ◆ Should not be the front line support person
 - ◆ Must follow up often



Trapped?

- ❖ Despite emerging standards/initiatives, systems aren't compatible
 - ◆ Courses aren't portable
 - ◆ Need to work with instructors to develop strategies for increased portability
 - ◆ If unhappy with current CMS, how is change managed?
 - ◆ -Parallel systems?
 - ◆ -How long are courses stored in 'old' system?



Next-Generation CMS: The Open Source Option

Bradley C. Wheeler

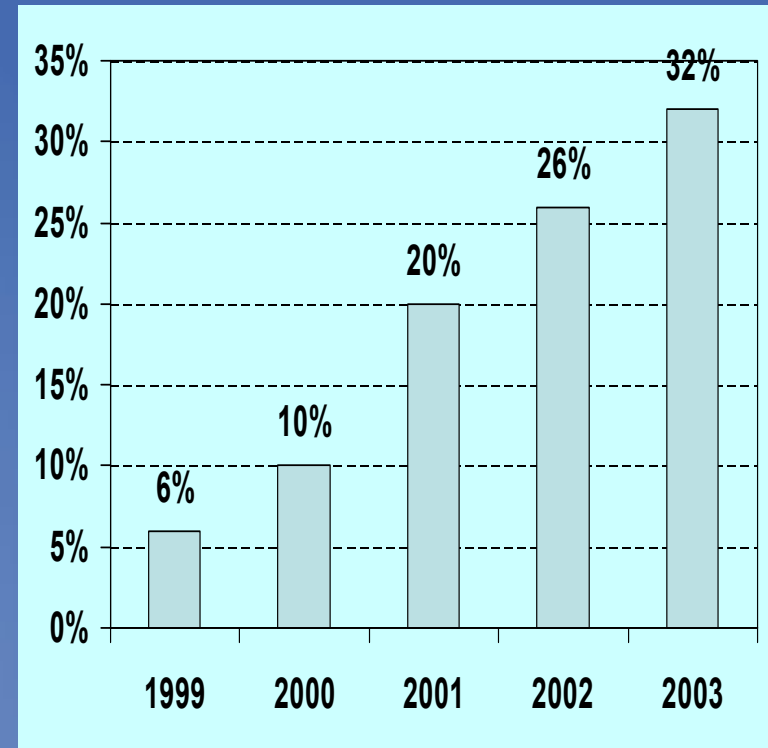
Indiana University



Oncourse at Indiana

- ❖ 7,332 Course Sections (32%)
- ❖ 5,352 Faculty (72%)
- ❖ 76,069 Students (79%)

Fall Term Sections using Oncourse



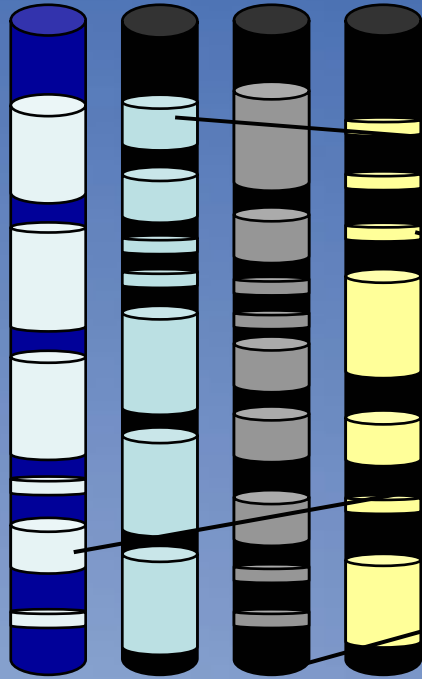
Indiana University

- ❖ Positive experiences with home-grown system - Oncourse
- ❖ 100,000+ students provide economies of scale – strong adoption and integration
- ❖ Want to maintain control of our destiny – “software code mobility” is the key economic bet



CMS Becomes Unbundled Collection of Portal Services

Library Registrar CMS UITS



onestart.iu.edu

Portal

- ✓ Authentication
- ✓ Personalization
- ✓ Workflow
- ✓ Delegation



Open Source CMS Choice

- ❖ Architecture uses OKI's services, J2EE
- ❖ Began as a MOU w/ U. Michigan
- ❖ Currently, In development with Michigan and Stanford on OKI-based quizzing tool
– www.navigoproject.org
- ❖ ePortfolio 2.0 beginning now with OSPI
- ❖ Full CMS build out with partner schools during 2004
- ❖ Fully available as open source 2004-05



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❖ Summary: Where Do We Go From Here?



What Have We Learned?

- ❖ Course Management Systems are becoming a ubiquitous tool in Higher Ed
- ❖ Faculty Adoption Rates Continue to Increase at Accelerating Pace
- ❖ Student Expectations Grow Exponentially
- ❖ CMS's are **NOT** Interoperable
 - ◆ Standards efforts like IMS notwithstanding
- ❖ The Initial Purchase Price is Just the “Tip of the Tip” of the Iceberg



Considerations

- ❖ Why did we implement CMS's?
 - ◆ Have we done adequate assessments?
- ❖ Do CMS's offer sufficient flexibility?
 - ◆ Or, do they constrain originality?
- ❖ How important is a consistent user interface?
 - ◆ Or, will students adapt to multiple CMS's?
- ❖ Can costs be reduced or at least level off?



Considerations

- ❖ Are CMS's a fundamental instructional format or just another tool?
- ❖ Have CMS's fundamentally changed the role of the faculty member?
- ❖ Have CMS's fundamentally changed our courses?
- ❖ Is there any real evaluation of the impact of CMS's on teaching and learning?



In Conclusion, We Must ...

- ❖ ... clearly define the role and purpose of a CMS at the institutional level.
- ❖ ... define goals and measurements to determine success.
- ❖ ... anticipate the true costs of alternative approaches to training and support.
- ❖ ... create a strategy for the evolution of the instructional environment.



Questions?



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