


Council for Christian Colleges & Universities 
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The Classroom Flip:

Becoming the Guide by the Side

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Summary Slide

- The “Classroom Flip” Model 
- The Ohio Model for Institutional Collaboration 
- Faculty & Student Assessment of “Flipped” Classes 

The “Classroom Flip” Model

Faculty Frustrations

- Students are unprepared for class
- How do I get my students to spend enough time in the class material?
- How do I get them to read the text?
- How do I help them apply the content?
- If I use active learning strategies, how do I get in all the content?

My Frustration

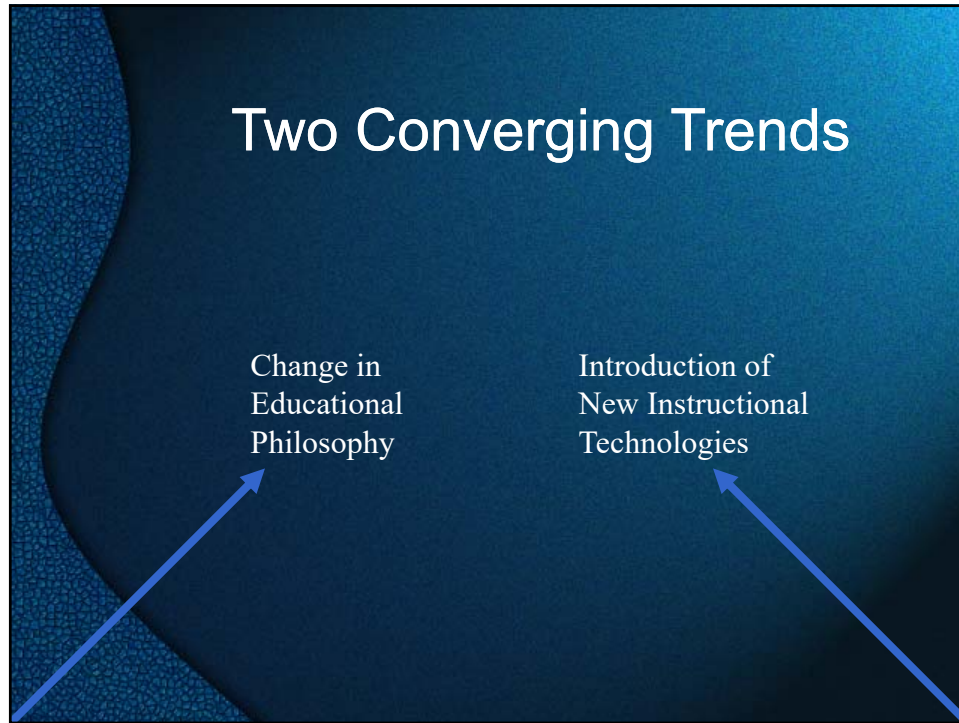
- Students don't seem to be "getting it"
- The "tyranny of the lecture"

Two Converging Trends

Change in
Educational
Philosophy

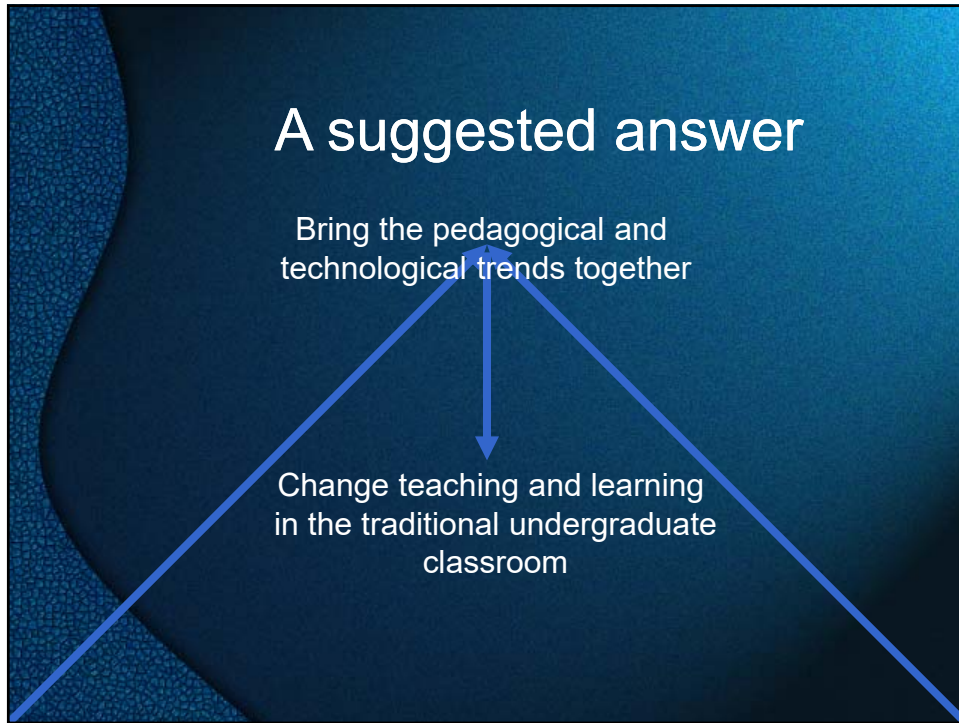


From the
"Sage on the
stage to the
Guide by the
Side."



The question

- How can college professors teaching face-to-face courses use these technologies to transform their classrooms?



-
- Assumption**
- New information technologies
 - provide lecture content
 - open up time for active learning
- The slide has a dark blue background with a lighter blue wavy pattern on the left side. The title 'Assumption' is centered at the top. Below it is a bulleted list with one main item and two sub-items.

Goals

- Find an approach to move from “sage” to “guide”
- Reduce time spent on lecturing
- Open up class time for active learning

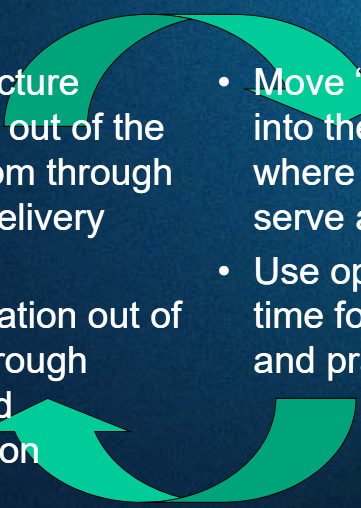
Goals

- Focus more on understanding and application than on recall . . .
- . . . while not sacrificing presentation of the factual base
- Provide students with more control over their own learning

Goals

- Give students a greater sense of responsibility for their own learning
- Provide students with more opportunities to learn from their peers

The Classroom Flip

- Move lecture material out of the classroom through online delivery
 - Move “homework” into the classroom where faculty can serve as guide
 - Extend conversation out of class through threaded discussion
 - Use opened up time for application and practice
- 

Enabling Technologies

- Course Management Systems
 - “Lectures”
 - Threaded discussion
 - Quizzes
 - Student Presentations
- “Ad hoc” Solutions

Classroom Changes

- Time for Active Learning
- Structure for class:
 - Clarify
 - Expand
 - Apply
 - Practice

Online “Lectures”

- Features
 - Web pages delivered in CMS
 - Multiple media sources available
 - Student use is recorded
 - Can link to
 - Objectives
 - Student notes
 - Discussion area

Online “Lectures”

- Benefits
 - Not restrained by class time
 - Can link to extra resources
 - Statistics on student use available
 - Student accountability
 - Increased time in-class for application and discussion

Online “Lectures”

- Examples from
 - Communication in the Information Age
 - Mass Media Law & Regulation
 - Graphic Design for Interactive Multimedia

In-Class Discussion

The screenshot shows an interactive multimedia interface for 'Eva-Tone'. The background is orange with a repeating pattern of the text 'EVA-TONE'. In the center, there is a black crosshair graphic. Four colored squares are arranged around the crosshair: pink for 'Optical Disc', blue for 'Audio', black for 'Print', and yellow for 'Packaging'. Above the crosshair, the text reads 'Click on any button for product information'. Below the crosshair, it says 'Click on the crosshair for information on Eva-Tone'. In the top right corner, there is a small video window showing an aerial view of a building complex, with standard video control buttons (play, stop, previous, next) below it. At the bottom, there are four buttons: 'Play Entire Video', 'Click here for more information', 'Forms Menu', and 'Quit'.

Online Discussion

- Types of Discussion
 - Synchronous (Chat Rooms)
 - Asynchronous (Threaded Discussion)

Online Discussion

- Features
 - Automatically created by CMS
 - Messages archived
 - Public/Private
 - With names/Anonymous

Online Discussion

- Benefits
 - 100% participation
 - “Voice” to the silent students
 - Thoughtful, articulate responses
 - “Time on task” with content
 - Use for student presentations with Q&A
 - Transcript available for review

Online Discussion

- Example from
 - Communication in the Information Age

Online Quizzes

- Types of items:
 - True-False
 - Multiple Choice
 - Matching
 - Short Answer
 - Calculated
 - Paragraph Answer (Essay)

Online Quizzes

- Features
 - Set time available
 - Generate quiz from pool of questions
 - Automatic grading
 - Set feedback based upon response
 - Allow multiple attempts

Online Quizzes

- Benefits
 - Holds students accountable for reading
 - Saves class time
 - Provides immediate feedback
 - Can repeat for mastery
 - Can be used for practice tests

Student Presentation

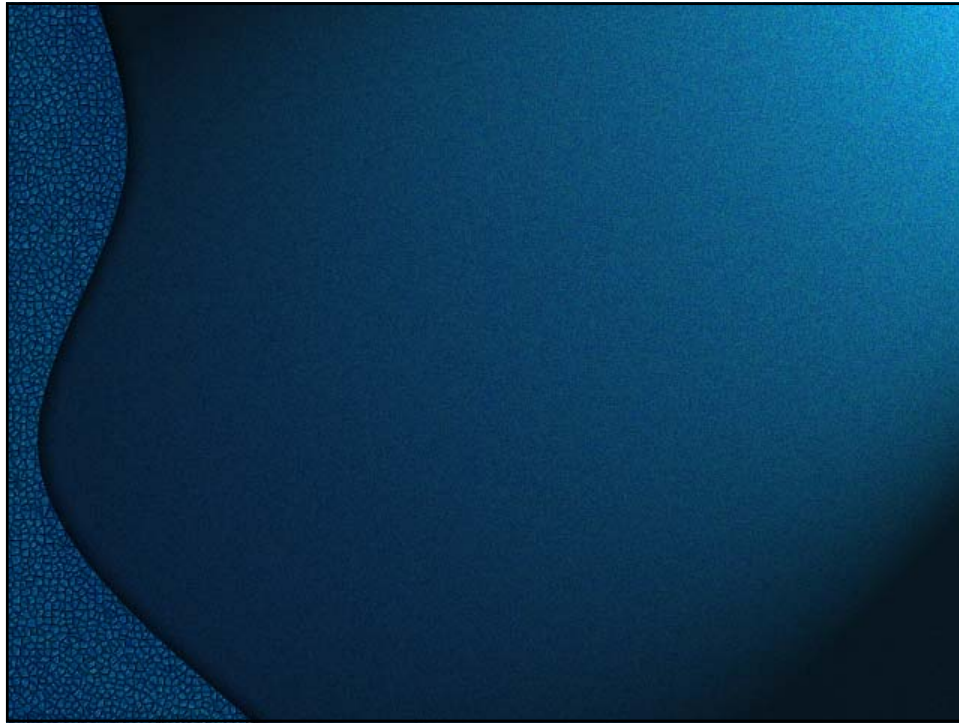
- Features
 - Area for students to upload material
 - Can be divided into groups

Student Presentation

- Benefits
 - Place for introductory personal information
 - In-class presentation available for review
 - Place for posting student projects

Conclusions

- CMS provide an integrated environment for class enhancement
- Automatically generates features most desired by faculty
- Students gain familiarity with system
- Provides data on student use
- Benefits both in and out of the classroom



The Ohio Model for Institutional Collaboration

Institutional Collaboration

- The “Ohio Model”
- OFIC/Ameritech Faculty Development Technology Program
 - Identify common needs in instructional technology
 - Use our own resources for development sessions
 - Rapid spread of skills to campuses

2000 Needs

- What do faculty need to know about the use of technology for teaching and learning?
 1. Effective Pedagogical Knowledge of Digital Practices
 2. Examples of Effective Practice
 3. Knowledge of Digital Tools' Possibilities

2000 Needs

- What do independent colleges need to do to enable faculty to develop and use this expertise with their students?
 1. Pedagogical Support
 2. Tech Support
 3. Faculty Development Program
 4. IT Stuff That Works (Infrastructure)

Solutions

- Regional Workshops
 - Hosted by our own schools – institutions facing the same constraints
 - Sessions led by faculty “just like me”
 - Goal: Get faculty started on projects that can be used in the next term

Solutions

- “Effective Practices”
 - Identify effective practices in the use for IT for teaching and learning
 - Provide a “clearing house” for research on those practices

Solutions

- www.imowa.org

illinois
michigan
ohio
wisconsin
ameritech

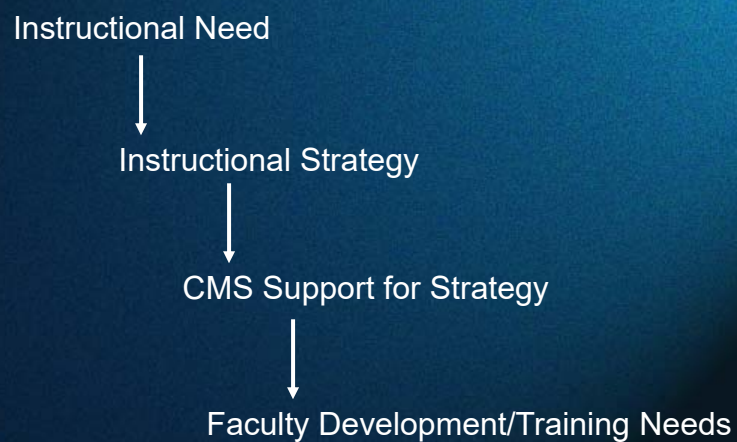


**Faculty Development
Technology Program**

Solutions

- Support for Instructional Support Mentors
- CMS Curriculum
 - Start with effective pedagogy
 - Explicitly link to ways in which a CMS can support the pedagogy

CMS Curriculum

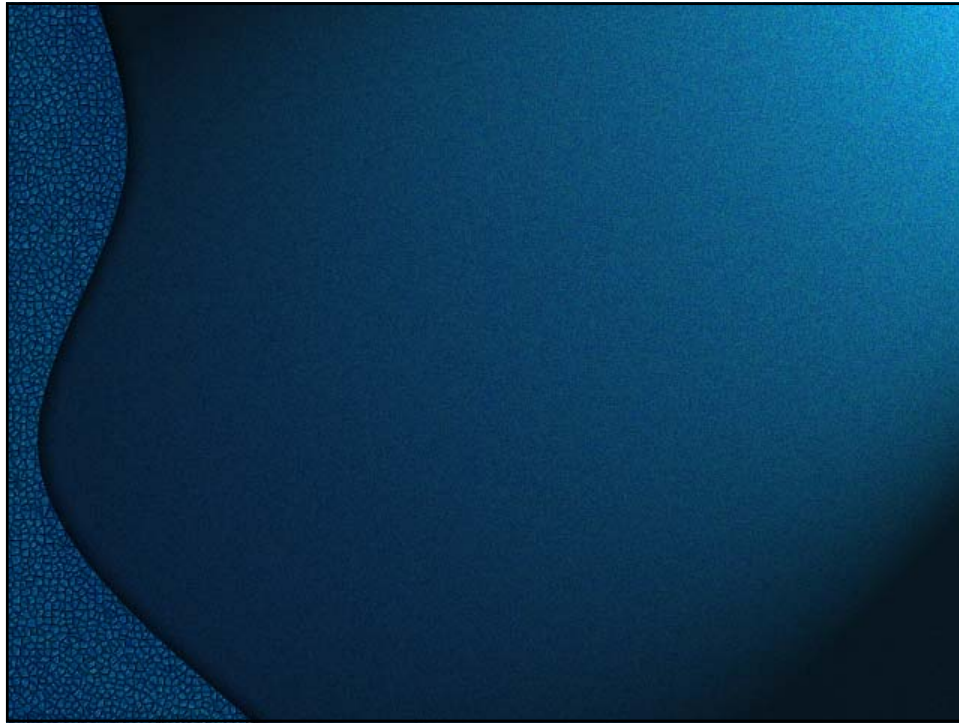


CMS Curriculum

Need	Strategy	CMS Support
My student's aren't prepared for class discussion because they haven't kept up with the reading.	Use more frequent quizzes over the text readings.	Online quizzes can be set up to be made available right up to the time class starts and then turn off. Students must read the material & take the quiz before class.
	Encourage their engagement with the readings through discussion of key points with others in the class.	Set up discussion groups for the class in the Threaded Discussion area in which regular discussion of text reading can be done.

Resources

- imowa site
 - <http://www.imowa.org/>
- Sample CMS Site/Handout
 - <http://www.cedarville.edu:8905/>
 - Click on my WebCT
 - User Name: student0x (x=1-7)
 - Password: student0x (x=1-7)
 - Assignment Dropbox



Faculty & Student Assessment of “Flipped” Classes

Faculty Assessment

- Cheryl Irish
 - Special Education
 - Small class (10)
 - Used online discussion
- Susan Warner
 - Marriage and the Family
 - Large lecture class (58)
 - Used online discussion

**Goal:
Open up Class Time**

**Goal:
More Active Learning**


Cheryl Irish
Education



“I can now use class time for discussions and learning activities I didn’t have time for before. I was frustrated with the short amounts of time I had in the past for these important experiences, but with WebCT for the concrete activities, we’re able to focus on higher levels of learning in class.”

**Goal:
Student sense of
responsibility for
learning**


Cheryl Irish
Education



“WebCT provides me with a mechanism for holding students accountable for reading assignments. They read the assignment and then take quizzes and participate in small group discussions over the reading material while in WebCT. This leaves class time for expanding on the topics and discussing them at a deeper level because they have been prepared before coming to class.”

**Goal:
Opportunities to
learn from peers**

Susan Warner
Sociology



“I was concerned my students have an outlet to be able to discuss relevant issues that surfaced during class discussion. So I divided them into group of approximately eight students. Each group had its own private bulletin board where they could post their reactions. They would often talk about their own families in ways they would not in class.”

Student Assessment

- Survey of Six Web-enhanced Classes
 - Range of Sizes: 9-58
 - Mean Class Size: 21.3
 - Students in-tab: 128
- Survey of Four Lecture Classes
 - Range of Sizes: 13-33
 - Mean Class Size: 22
 - Students in-tab: 88

Student Assessment

Statements with strongest positive ratings
(Strongly Agree = 1)

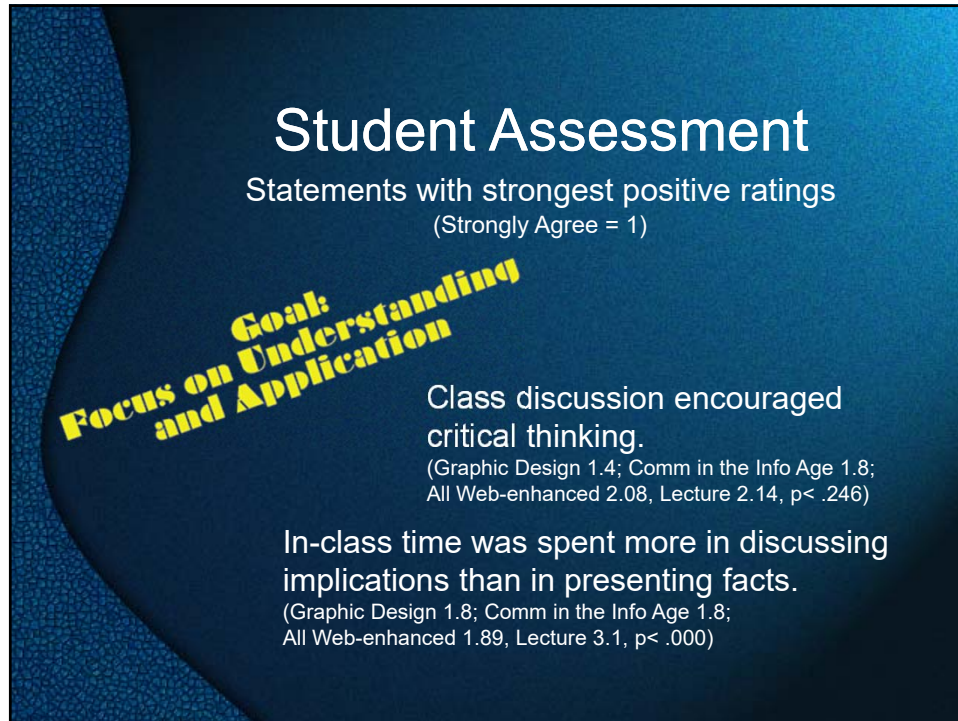
**Goal:
Opportunities to
learn from peers**

The class encouraged me to spend more time collaborating with other students than I typically do in other classes. (Graphic Design 1.3;

All Web-enhanced 2.73, Lecture 3.23, $p < .002$)

I feel I learned from my fellow students through their presentations and comments in class discussion.

(Graphic Design 1.7; Comm in the Info Age 2.3;
All Web-enhanced 2.05, Lecture 2.8, $p < .003$)

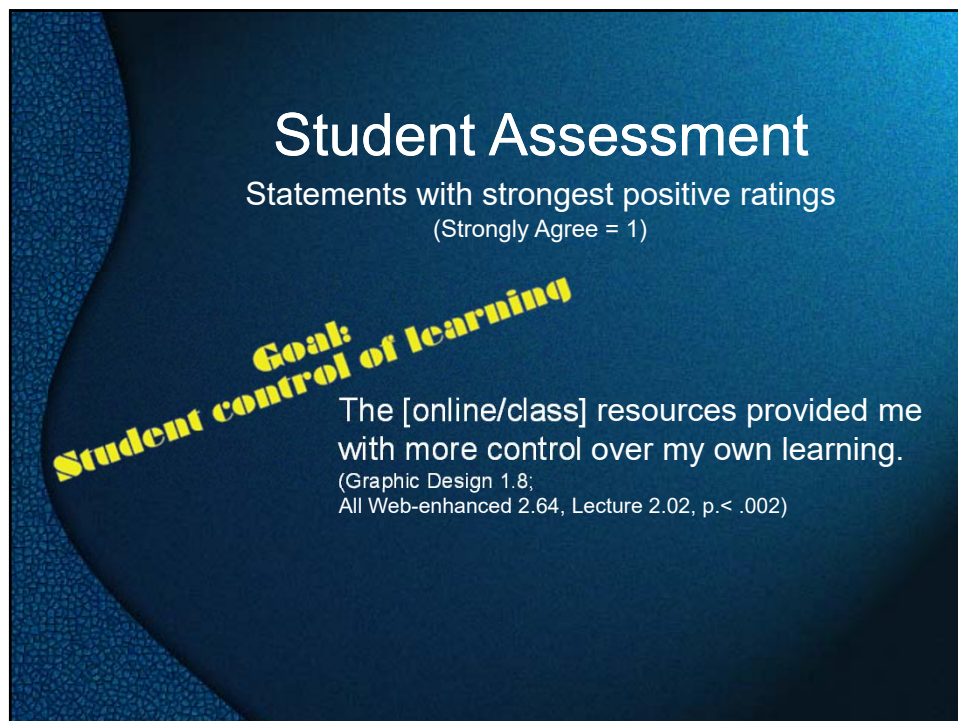


Student Assessment
Statements with strongest positive ratings
(Strongly Agree = 1)

**Goal:
Focus on Understanding
and Application**

Class discussion encouraged
critical thinking.
(Graphic Design 1.4; Comm in the Info Age 1.8;
All Web-enhanced 2.08, Lecture 2.14, p< .246)

In-class time was spent more in discussing
implications than in presenting facts.
(Graphic Design 1.8; Comm in the Info Age 1.8;
All Web-enhanced 1.89, Lecture 3.1, p< .000)



Student Assessment
Statements with strongest positive ratings
(Strongly Agree = 1)

**Goal:
Student control of learning**

The [online/class] resources provided me
with more control over my own learning.
(Graphic Design 1.8;
All Web-enhanced 2.64, Lecture 2.02, p.< .002)

Student Assessment
Statements with strongest positive ratings
(Strongly Agree = 1)

**Goal:
Student sense of
responsibility for
learning**

I was more responsible for my own learning in this class compared with others.
(Comm in the Info Age 1.8;
All Web-enhanced 2.10, Lecture 2.69, $p < .000$)

Student Assessment
Statements with strongest positive ratings
(Strongly Agree = 1)

**Goal:
From Sage to Guide**

The online material and in-class discussion made the course more of a forum than a lecture. (Comm in the Info Age 2.1;
All Web-enhanced 2.05, Lecture 3.3, $p < .000$)

