

Eleventh International Conference on
College Teaching and Learning

The Classroom Flip: Becoming the “Guide by the Side”

J. Wesley Baker, Ph.D.
Cedarville College

Faculty Frustrations

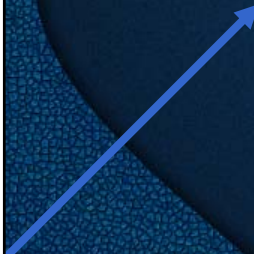
- Students are unprepared for class
- How do I get my students to spend enough time in the class material?
- How do I get them to read the text?
- How do I help them apply the content?
- If I use active learning strategies, how do I get in all the content?

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."

Two Converging Trends

Change in
Educational
Philosophy

Introduction of
New Instructional
Technologies

Old v. New Technologies

“Old”	“New”
Passive	Interactive
Analog	Digital
Linear	Non-linear

The question

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

A suggested answer

Bring the pedagogical and technological trends together

Change teaching and learning in the traditional undergraduate classroom

Assumption

- New information technologies
 - provide lecture content
 - open up time for active learning

Goals

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

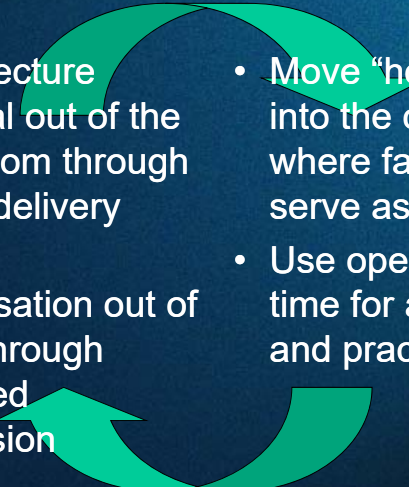
Goals

- 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
- Use opened up time for application and practice
- Extend conversation out of class through threaded discussion

Online Components

- “Lectures”
- Threaded discussion
 - Extend the conversation
 - Give voice to silent students
- Quizzes
- Student Presentations

Classroom Changes

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

Sample of a Flipped Course

- Graphic Design for Interactive
Multimedia

Graphic Design Example

- Online lecture content module

Graphic Design Example

The screenshot displays a user interface for an online lecture content module. The background is orange with a repeating pattern of the text 'EVA-TONE'. At the top left, it says 'Click on any button for product information'. Below this are four colored buttons: 'Optical Disc' (pink), 'Audio' (blue), 'Print' (black), and 'Packaging' (yellow). A central crosshair is overlaid on these buttons. Below the buttons, it says 'Click on the crosshair for information on Eva-Tone'. To the right is a video player showing an aerial view of a building complex, with standard video control buttons (play, stop, next, previous, full screen) below it. At the bottom, there are four buttons: 'Play Entire Video', 'Click here for more information', 'Forms Menu', and 'Quit'.

Graphic Design Example




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.”

Susan Warner
Sociology

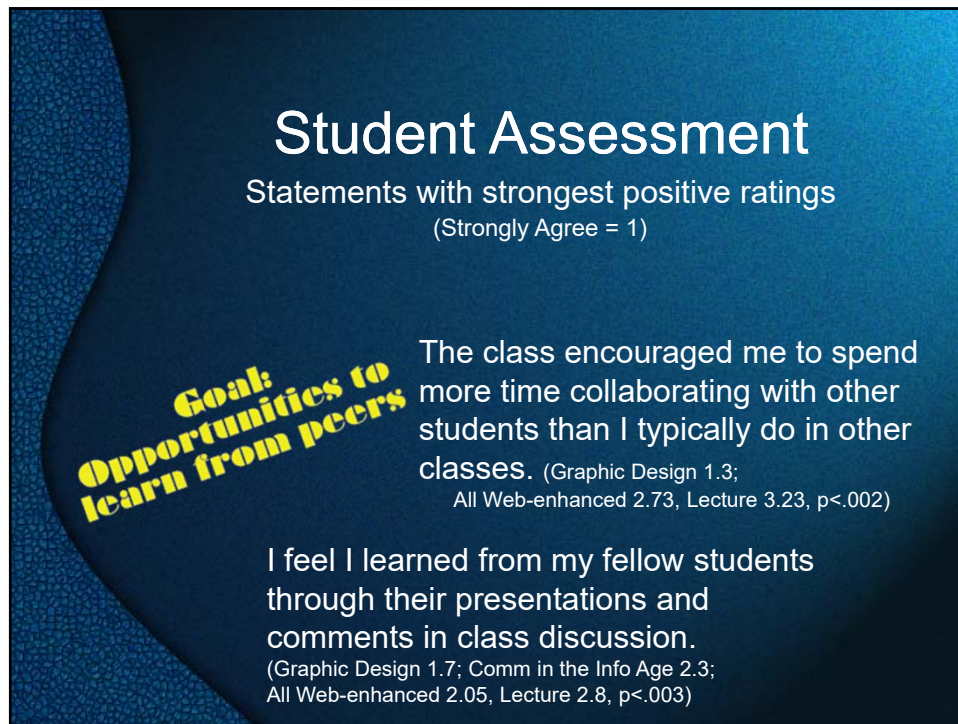


**Goal:
Opportunities to
learn from peers**

“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

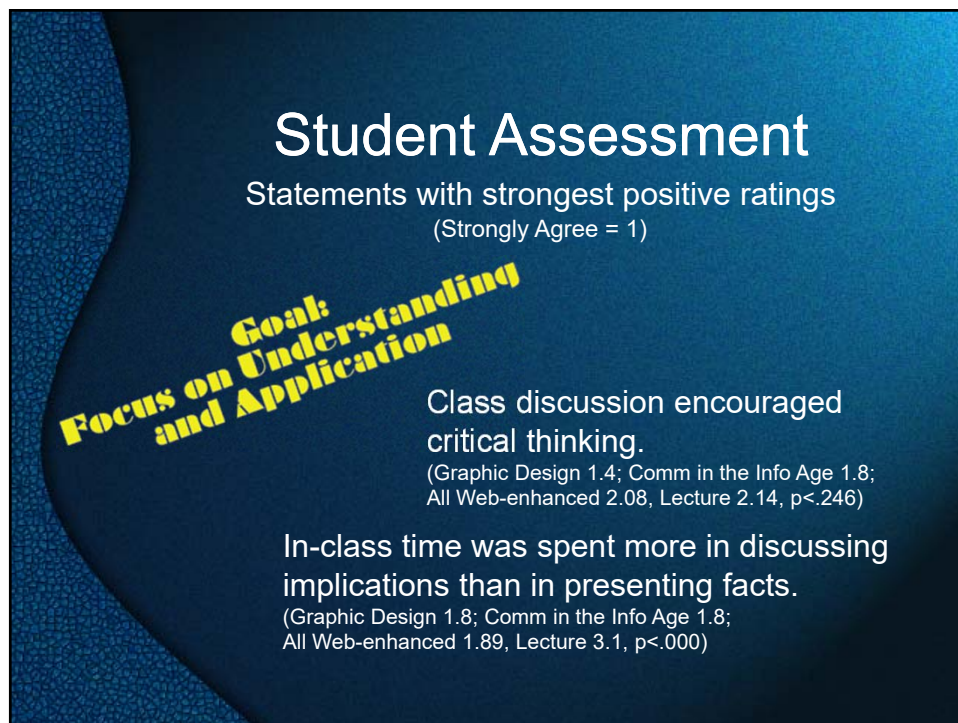


Student Assessment
Statements with strongest positive ratings
(Strongly Agree = 1)

**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, $p < .003$)

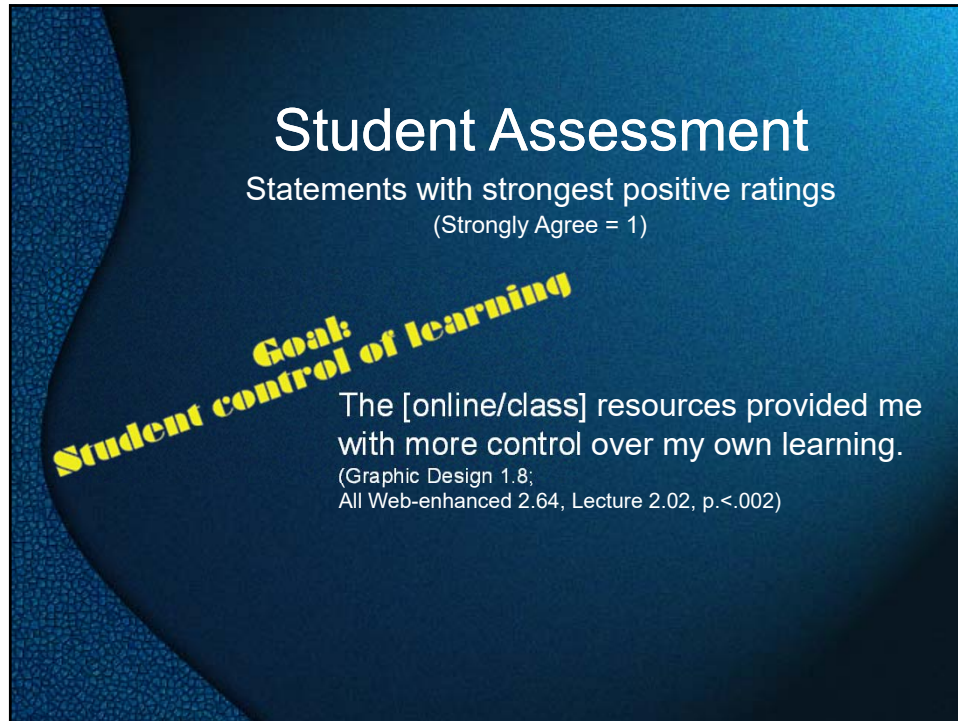


Student Assessment
Statements with strongest positive ratings
(Strongly Agree = 1)

**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, $p < .000$)

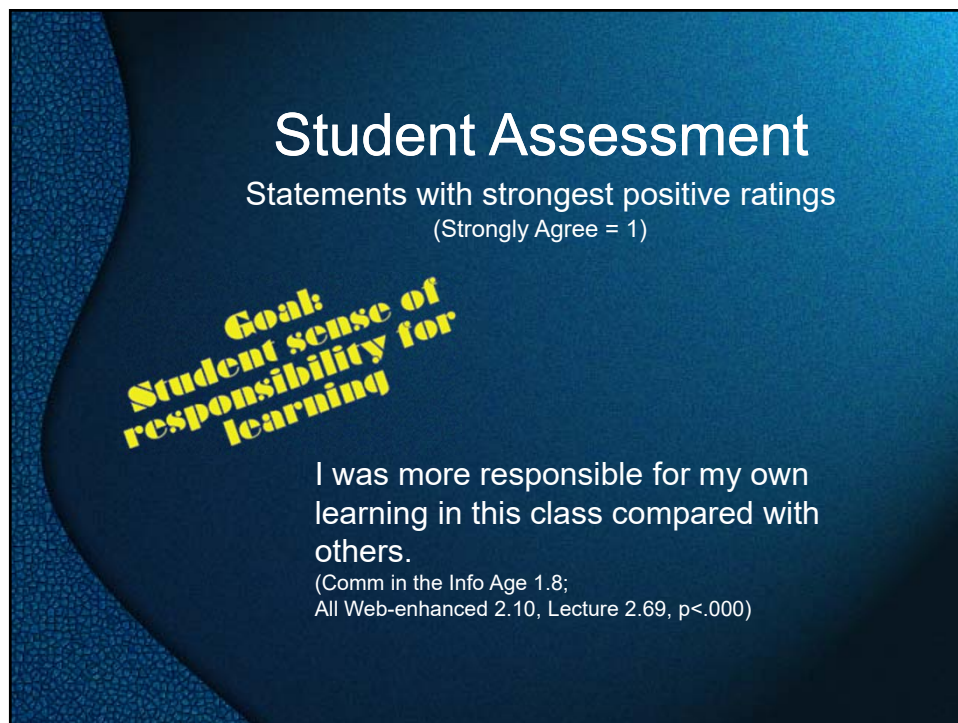


Student Assessment
Statements with strongest positive ratings
(Strongly Agree = 1)

**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)

This slide features a dark blue background with a lighter blue wavy shape on the left side. The text is white and yellow. The goal is written in a bold, yellow, sans-serif font, slanted upwards. The main statement is in white, and the supporting text is in a smaller white font.



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)

This slide features a dark blue background with a lighter blue wavy shape on the left side. The text is white and yellow. The goal is written in a bold, yellow, sans-serif font, slanted upwards. The main statement is in white, and the supporting text is in a smaller white font.

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, $p < .000$)

Conclusions

- Features of Course Management software have utility for face-to-face classes
- Classroom Flip model suggests faculty can
 - bring benefits of increased interactivity and collaboration in class
 - not sacrifice any coverage of content

