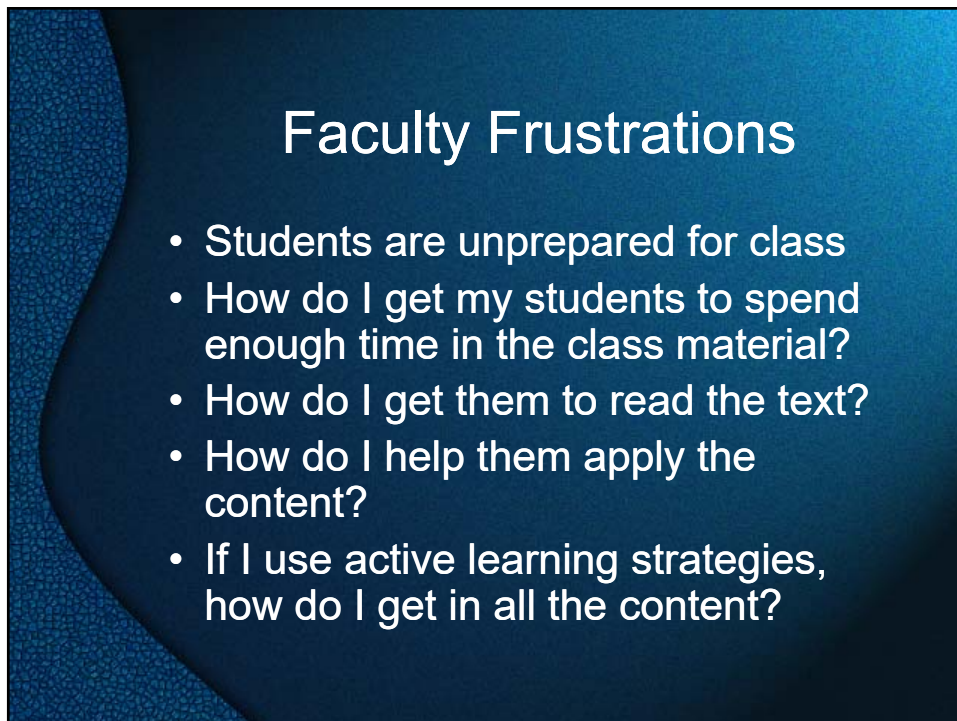CIC

Information Technologies Workshop

The Classroom Flip:

Becoming the "Guide by the Side"

J. Wesley Baker, Ph.D.
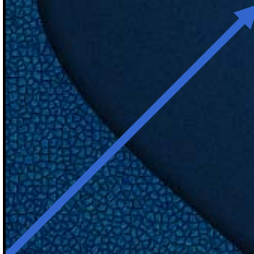Cedarville College

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?
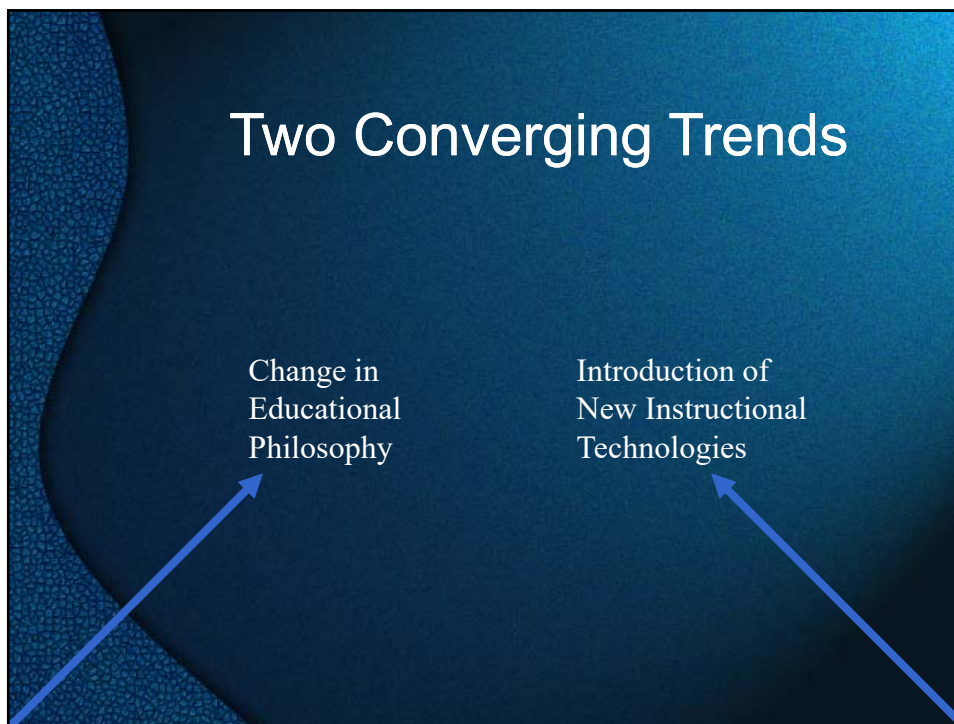
My Frustration

- 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
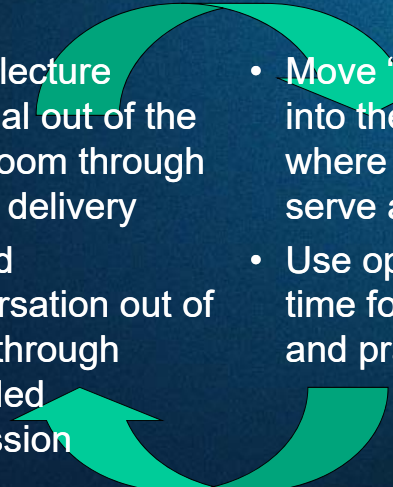- Open up class time for active learning

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

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

Faculty Assessment

- **Cheryl Irish**
  - Special Education
  - Mid-sized class (c. 15)
  - Used online discussion
- **Susan Warner**
  - Marriage and the Family
  - Large lecture class (c. 60)
  - Used online discussion

Cheryl Irish
Education

Goal:
Open up Class Time

Goal:
More Active Learning

"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

- Two classes surveyed
  - Graphic Design
    - 18 students
    - 22 items
  - Communication in the Information Age
    - 56 students
    - 35 items
- Survey of Four Lecture Classes

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; Lecture 3.2)

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; Lecture 2.8)

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; Lecture 2.1)

In-class time was spent more in discussing implications than in presenting facts.
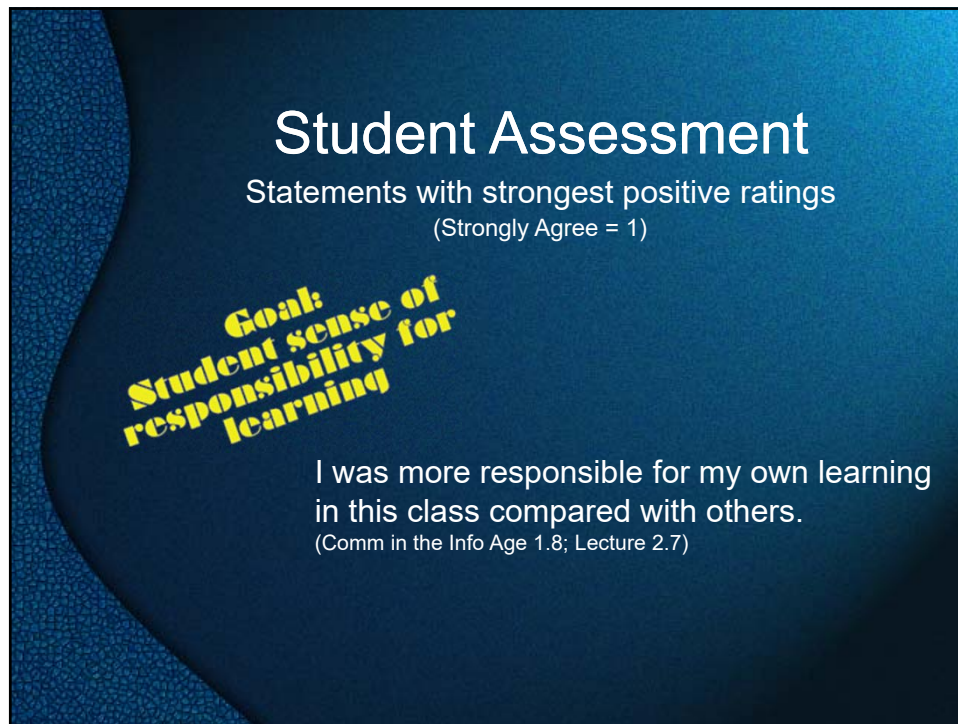(Graphic Design 1.8; Comm in the Info Age 1.8; Lecture 3.1)

Student Assessment

Statements with strongest positive ratings
(Strongly Agree = 1)

Goal: Student control of learning

The online resources provided me with More control over my own learning.
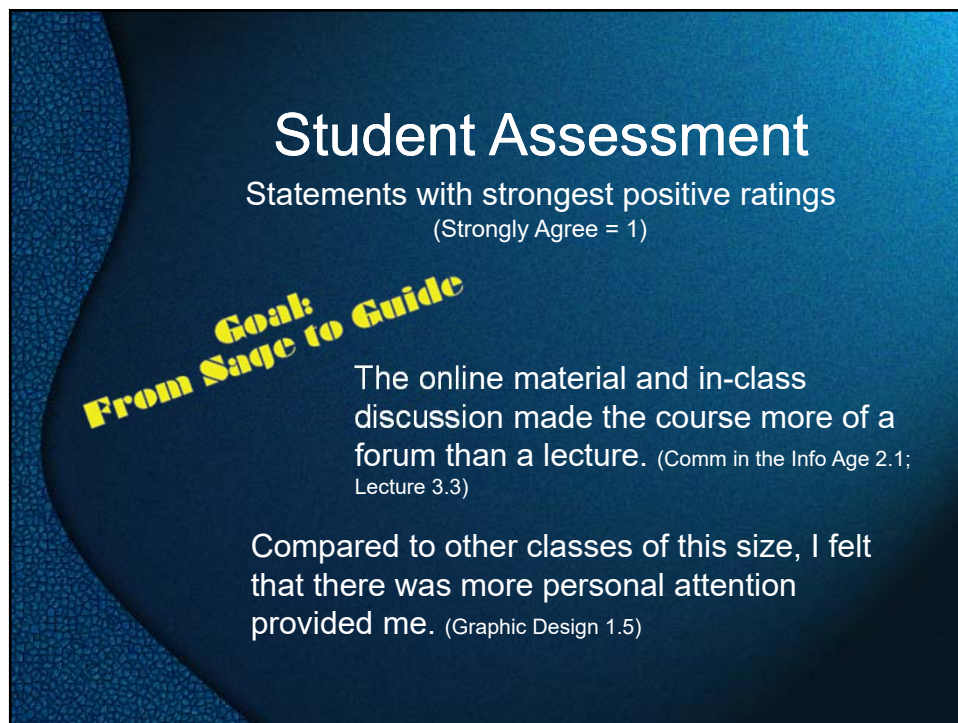(Graphic Design 1.8; Lecture - "Class resources" - 2.0)

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; Lecture 2.7)

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;
Lecture 3.3)

Compared to other classes of this size, I felt
that there was more personal attention
provided me. (Graphic Design 1.5)

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 content