

Teaching Instructional Design Online

Opportunities and Obstacles to Collaborative
Learning



Lloyd Rieber

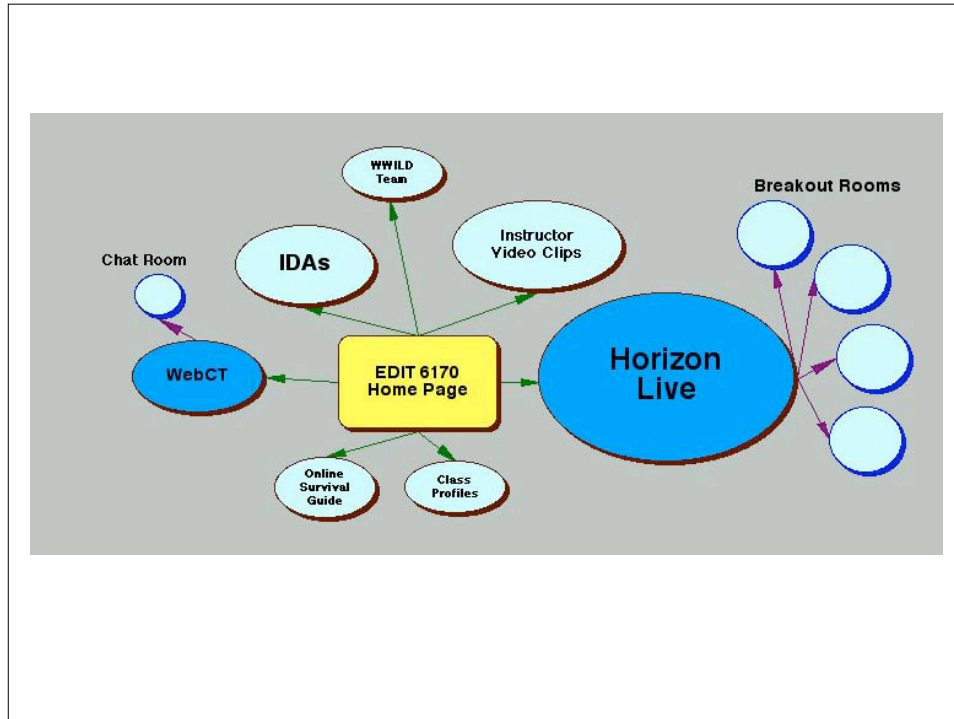


Michele Estes

Department of Instructional Technology
The University of Georgia
<http://it.coe.uga.edu/~lrieber/aera2004>

Agenda

- Challenge of teaching and learning ID in an online course
- Present a modestly successful course with emphasis on the...
 - HorizonLive Virtual Classroom
 - Online IDAs
- Evidence of its effectiveness
- Conclusions



A Little About EDIT 6170 Course Requirements

- Read Dick, Carey, & Carey
- Instructional design activities (IDAs)
- Informal assignments
 - Learning from Media
 - WWILD Team
- Team project
 - Design “course” but implement/field test only one unit of instruction

Participating Classes

- Spring, 2003 Semester
 - Audience: 22 participants, mixed (teachers, business, higher ed)
 - 16 weeks
 - Class met once a week for 3 hours
 - Notes & Updates, review, presentation, practice
- Summer 2003 short session
 - Audience: 24 participants, primarily teachers
 - 3.5 weeks
 - Met every day for 3 hours
 - Notes & Updates, review, presentation, practice
 - (Same requirements, expectations)

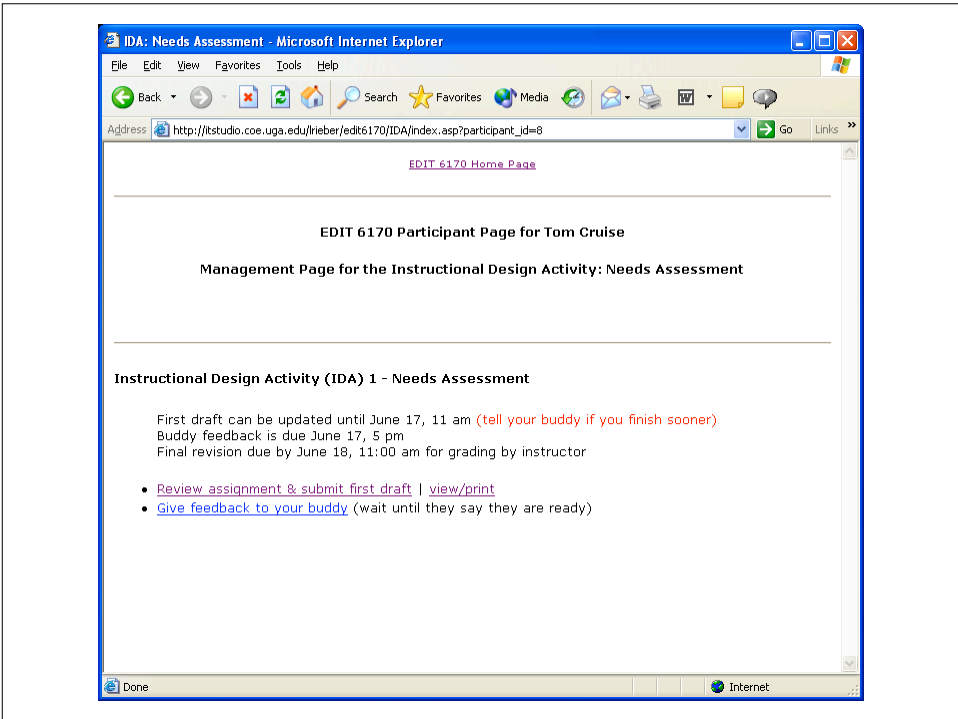
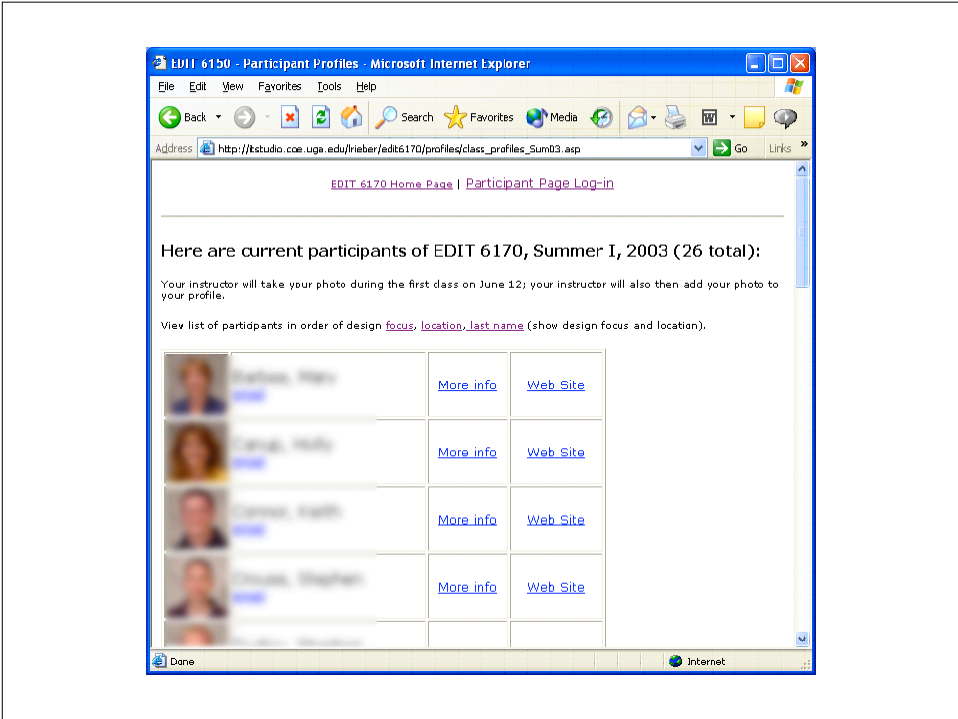
EDIT 6170 HorizonLive Virtual Classroom

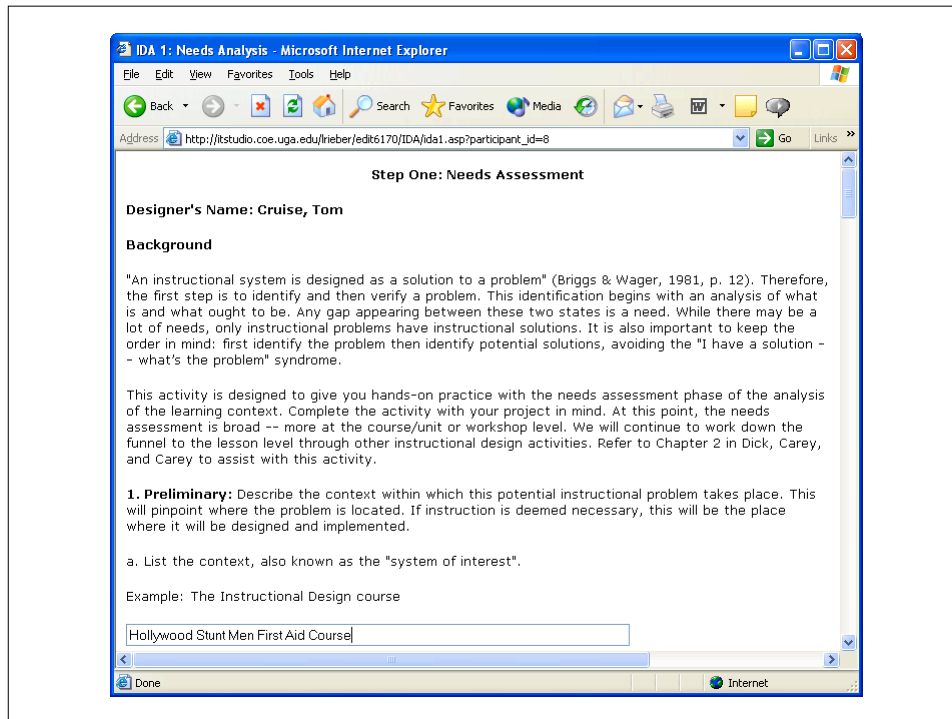
Presentation Window

The screenshot shows a web browser window titled "HorizonLive - Microsoft Internet Explorer". The main content area displays the University of Georgia logo (a dome icon with "1785" below it) and the text "The University of Georgia" in red. Below this, the course title "Introduction to Instructional Design (Rieber SP03)" is centered. At the bottom, there is a navigation bar with icons for "AUDIO", "LOBBY", "IM", "HELP", and "EXIT". A status bar at the very bottom shows "Login Name: rieber_test Host: horizonlive.uga.edu TCPChannel: edit6170 Rieber User Count: 1 YES: 0 NO: 0 ? : 0".

Audio Window

The screenshot shows a "Audio Console - Microsoft ..." window. It features a "Talk Status" section with a microphone icon, a "Connected" status, and a timer showing "00:02:30". Below this is a "Floor" section with a "P" icon and the name "rieber_test". At the bottom, there are "Compose" and "Messages" buttons, a volume control slider, and a "POWERED BY HearMe" logo.





Instructional Design Activities

- Purpose
 - Individually practice each of the following instructional design skills as it is covered to understand the process of the skill:
 - Needs Assessment
 - Course Design
 - Unit Design
 - Lesson Design
 - Formative Evaluation

Instructional Design Activities

- Submit first draft
- Get buddy feedback
- Revise based on buddy feedback
- Instructor evaluation

Instructor Evaluation

- After deadline passes, instructor “switches on” instructor assessment phase
- Instructor has access to all responses
 - Participant’s first draft
 - Buddy feedback
 - Participant’s revised/final draft
- Participant has access to instructor feedback as soon as instructor “releases” evaluation

Midterm Questionnaire

- Anonymous
- 15 questions - mixture of structured and open-ended formatting
- Questions addressed demographic information, perceived skills and changes in skills, self-selection processes, expectations, attitudes, and benefits and pitfalls of team work.

Results

- First night mixer helped prepare learners in the f2f setting, to select design buddies and team members
- By midpoint, learner computer and distance learning skills had changed; skill levels were in the areas of computer technology, distance learning, and team project activities at the midpoint
- Attitude and geographic location were very important in the self-selection of team members; most hoped attitudes would be very similar to their own.
- All but 1 student expected the team project to be challenging or very challenging at the midpoint.
- Major concerns about the team project were related to time and effective communications/collaboration.
- Major benefits of team work were perceived as: variety of skills/perspectives, efficiency given the short timeline, and immersion in real-world experiences of an ISD team effort.

Evaluation of Team Projects

| Final Score | Projects |
|-------------|----------|
| 90-100 | 6 |
| 80-90 | 1 |
| 70-80 | 1 |

End-of-Course Questionnaire
Completed online anonymously

Part I: Course Delivery

- What was your Internet connection speed when you attended class online?

| | Spring | Summer |
|-----------------|--------|--------|
| High speed (T1) | 5 | 3 |
| DSL | 3 | 8 |
| Cable modem | 6 | 4 |
| 56K modem | 2 | 5 |
| 28K modem | 0 | 0 |

Part I: Course Delivery

- Please evaluate and comment on the online delivery of this course.

| | Spring | Summer |
|--------------------|--------|--------|
| Excellent-5 | 6 | 6 |
| Very good-4 | 5 | 6 |
| Satisfactory-3 | 5 | 7 |
| Less than satis.-2 | 0 | 1 |
| Very unsatis.-1 | 0 | 0 |
| Mean | 4.1 | 3.9 |

Part I: Course Delivery

- Please compare the online delivery of this course to what you would have expected if it were delivered face-to-face.

| | Spring | Summer |
|-------------------|------------|------------|
| Superior to f2f-5 | 4 | 1 |
| Somewh better-4 | 5 | 8 |
| About the same-3 | 4 | 9 |
| Somewh worse-2 | 3 | 2 |
| Much worse-1 | 0 | 0 |
| Mean | 3.6 | 3.4 |

Part II: Evaluation of Specific Course Elements

- Please rate the usefulness/value of the following course elements as judged by the purpose of each.
 - Excellent - definitely achieved its purpose
 - Very good - achieved its purpose overall
 - OK - achieved its purpose more or less
 - Less than adequate - it did not achieve its purpose most of the time
 - Poor - it did not achieve its purpose at all

| Element | Spring Mean | Summer Mean |
|--|--------------------|--------------------|
| Nowhere Road Informal Orientation Videos | 4.3 | 3.9 |
| Class Presentations | 4.4 | 3.8 |
| Instructional Design Activities (IDAs) | 4.4 | 4.1 |
| Buddy Feedback to IDAs | 4.2 | 4.5 |
| Course Web Site | 4.8 | 4.8 |
| Participant Pages | 4.6 | 4.6 |
| Informal Activity – WWILD Team | 4.3 | 3.9 |
| Informal Activity – Learning from Media | 3.9 | 4.0 |
| Team Project | 4.3 | 4.2 |
| ePoster Session | 4.1 | 3.8 |
| Dick, Carey, & Carey Textbook | 3.0 | 3.3 |

COE Course Evaluation

- 5 categories of items
 - Instructor Preparation
 - Course Organization
 - Student Evaluation
 - ?
 - ?
- Item 35: Your overall rating of the course
- Item 36: Your overall rating of the instructor

Results?

COE Course Evaluation

| | Spring | Summer |
|--|--------|--------|
| 5 categories of items Instructor Preparation Course Organization Student Evaluation ? ? | High | High |
| Item 35: Your overall rating of the course Item 36: Your overall rating of the instructor | High | Low |

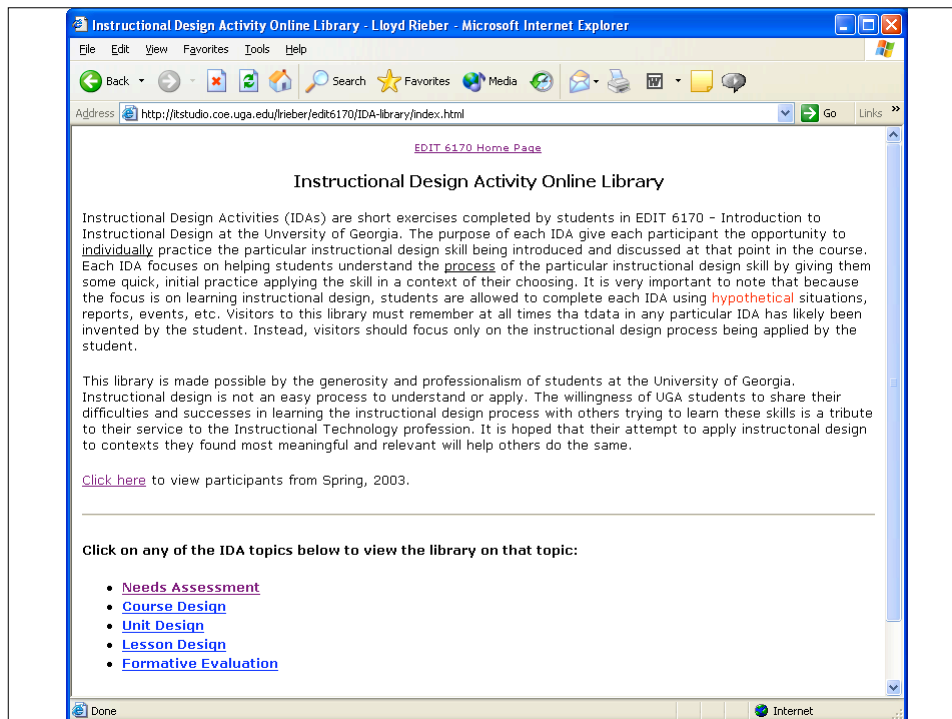
COE Course Evaluation Lloyd's Hypothesis

| Question type | Response type |
|-----------------------|---------------|
| 5 categories of items | Cognitive |
| Item 35 & 36 | Emotional |

- Lloyd's advice to online instructors:
 - Do not rely on traditional course evaluation instruments to make the case that your course and your teaching is effective
 - Build an instructional portfolio

IDA Library

Idea inspired by the students!



| Rating | Context (System of Interest) | Semester | Evaluated by |
|--------------|---|--------------|--------------|
| Exemplary | East Newton Elementary School's PRIDE Volunteer Program | Spring, 2003 | Lloyd Rieber |
| Exemplary | Grayson HS | Spring, 2003 | Lloyd Rieber |
| Exemplary | Integration of Technology at Wesleyan School | Summer, 2003 | Michael Orey |
| Exemplary | Madison County High School classroom | Summer, 2003 | Michael Orey |
| Exemplary | OIT Customer Services Helpdesk and GALILEO | Spring, 2003 | Lloyd Rieber |
| Exemplary | Recording for the Blind and Dyslexic - the Georgia Unit | Spring, 2003 | Lloyd Rieber |
| Satisfactory | 4th Grade Teachers at Shiloh Elementary | Summer, 2003 | Michael Orey |
| Satisfactory | Chinese graduate students and scholars in Athens | Spring, 2003 | Lloyd Rieber |
| Satisfactory | Collins Hill High School Business Concepts Course | Spring, 2003 | Lloyd Rieber |
| Satisfactory | Developing Career Choices | Summer, 2003 | Michael Orey |
| Satisfactory | Discipline at Vince Dooley Middle School | Summer, 2003 | Michael Orey |
| Satisfactory | Doing Research at the Tribyte Library: a How-To Course for Neophytes (University of Wisconsin - Flambeau Falls) | Spring, 2003 | Lloyd Rieber |
| Satisfactory | Eastside High School | Summer, 2003 | Michael Orey |
| Satisfactory | First grade classroom at Harmony Elementary School in Gwinnett County, Georgia | Spring, 2003 | Lloyd Rieber |
| Satisfactory | Geography Classes (middle/junior high school) | Spring, 2003 | Lloyd Rieber |
| Satisfactory | Gifted Honors Algebra at Snellville Middle School | Summer, 2003 | Michael Orey |
| Satisfactory | Gwinnett County Public Schools Media Centers | Summer, 2003 | Michael Orey |
| Satisfactory | Hill Community Desk Staff | Spring, 2003 | Lloyd Rieber |
| Satisfactory | Intoduction to solve adpation problems in Athens | Summer, 2003 | Michael Orey |
| Satisfactory | MIST 5640 - Internet Technologies Course | Spring, 2003 | Lloyd Rieber |
| Satisfactory | Newton High School's Business Education Career Development Program | Summer, 2003 | Michael Orey |
| Satisfactory | Norcross High School | Summer, 2003 | Michael Orey |

Conclusions

- Evidence suggests this was a modestly successful online course
- Activity-based philosophy of the course was maintained
 - I would use my online IDAs even if I taught the course f2f
- Opportunities of the technology were used at least to some degree
- Influences of student population, course duration, and course expectations

Opportunities get taken hypothesis

- Presented by David Perkins in 1985
- Referred to whether a word processor would make someone a better writer
- It doesn't automatically, but the more you use a WP, the more likely it is that you will take advantage of the opportunities provided by the affordances of a WP in your writing.
- "What are the opportunities of the online technologies I'm using for enabling and enhancing teaching and learning?"