



Evaluating Distributed Education

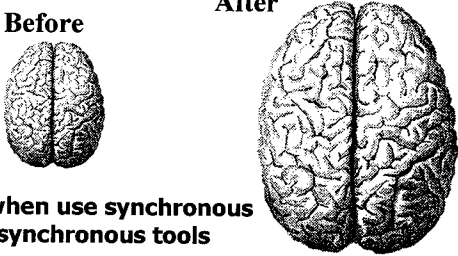


Dr. Curtis J. Bonk
 Professor, Indiana University
 President, CourseShare.com
<http://php.indiana.edu/~cjbok>,
cjbok@indiana.edu



Brains Before and After E-learning

Before **After**




And when use synchronous and asynchronous tools

Tons of Recent Research

Not much of it


...is any good...



Problems and Solutions

(Bonk, Wisher, & Lee, 2003)


| | |
|--|-----------------------------------|
| 1. Tasks Overwhelm | > Train and be clear |
| 2. Confused on Web | > Structure time/dates due |
| 3. Too Nice Due to Limited Share History | > Develop roles and controversies |
| 4. Lack Justification | > Train to back up claims |
| 5. Hard not to preach | > Students take lead role |
| 6. Too much data | > Use Email Pals |
| 7. Communities not easy to form | > Embed Informal/Social |




Benefits and Implications

(Bonk, Wisher, & Lee, 2003)

| | |
|--|--|
| 1. Shy open up online | > Use async conferencing |
| 2. Minimal off task | > Create social tasks |
| 3. Delayed collab more rich than real time | > Use Async for debates; Sync for help, office hours |
| 4. Students can generate lots of info | > Structure generation and force reflection/comment |
| 5. Minimal disruptions | > Foster debates/critique |
| 6. Extensive E-Advice | > Find Experts or Prac. |
| 7. Excited to Publish | > Ask Permission |



Basic Distance Learning Finding?



- Research since 1928 shows that DL students perform as well as their counterparts in a traditional classroom setting.

Per: Russell, 1999, The No Significant Difference Phenomenon (5th Edition), NCSU, based on 355 research reports.
<http://cuda.teleeducation.nb.ca/nosignificantdifference/>

Online Learning Research Problems

(National Center for Education Statistics, 1999; Phipps & Merisotos, 1999; Wisher et al., 1999).

- Anecdotal evidence; minimal theory.
- Questionable validity of tests.
- Lack of control group.
- Hard to compare given different assessment tools and domains.
- Fails to explain why the drop-out rates of distance learners are higher.
- Does not relate learning styles to different technologies or focus on interaction of multiple technologies.

Online Learning Research Problems (Bonk & Wisher, 2001)

- For different purposes or domains: in our study, 13% concern training, 87% education
- Flaws in research designs
 - Only 36% have objective learning measures
 - Only 45% have comparison groups
- When effective, it is difficult to know why
 - Course design?
 - Instructional methods?
 - Technology?

Instruction: Methods and Findings

(Olson & Wisher (2002) The Effectiveness of Web-Based Instruction: An Initial Inquiry; International Review of Research in Open and Distance Learning)

"...there is little consensus as to what variables should be examined and what measures of learning are most appropriate, making comparisons between studies difficult and inconclusive."

e.g., demographics (age, gender), previous experience, course design, instructor effectiveness, technical issues, levels of participation and collaboration, recommendation of course, desire to take add'l online courses.

Evaluating web-Based Instruction: Methods and Findings

(Olson & Wisher (2002) The Effectiveness of Web-Based Instruction: An Initial Inquiry; International Review of Research in Open and Distance Learning)

Variables Studied:

1. Type of Course: Graduate (18%) vs. undergraduate courses (81%)
2. Level of Web Use: All-online (64%) vs. blended/mixed courses (34%)
3. Content area (e.g., math/engineering (27%), science/medicine (24%), distance ed (15%), social science/educ (12%), business (10%), etc.)

Other data:

- a. Attrition data collected (34%)
- b. Comparison Group (59%)

Different Goals...



- Making connections
- Appreciating different perspectives
- Students as teachers
- Greater depth of discussion
- Fostering critical thinking online
- Interactivity online

Research on Instructors Online

- If teacher-centered, less explore, engage, interact (Peck, and Laycock, 1992)
- Informal, exploratory conversation fosters risktaking & knowledge sharing (Weedman, 1999)
- Four Key Acts of Instructors:
 - pedagogical, managerial, technical, social (Ashton, Roberts, & Teles, 1999)
- Instructors Tend to Rely on Simple Tools (Peppers & Bloom, 1999)
- Job Varies--Plan, Interaction, Admin, Tchg (McIsaac, Blocher, Mahes, & Vrasidas, 1999)

Network Conferencing Interactivity

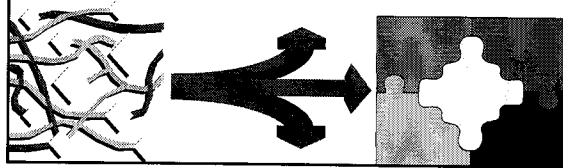
(Rafaeli & Sudweeks, 1997)

1. > 50 percent of messages were reactive.
2. Only around 10 percent were truly interactive.
3. Most messages factual stmts or opinions
4. Many also contained questions or requests.
5. Frequent participators more reactive than low.
6. Interactive messages more opinions & humor.
7. More self-disclosure, involvement, & belonging.
8. Attracted to fun, open, frank, helpful, supportive environments.



What do we need???

FRAMEWORKS!!!



15 Evaluation Methods

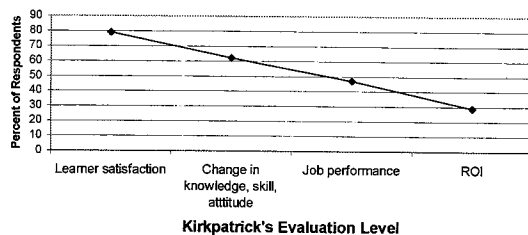
1. Formative Evaluation
2. Summative Evaluation
3. CIPP Model Evaluation
4. Objectives-Oriented Evaluation
5. Marshall & Shriver's 5 Levels of Evaluation
6. Consumer-Oriented Evaluation
7. Kirkpatrick's 4 Levels
8. Return on Investment (ROI)
9. K-Level 6 budget and stability of e-learning team.
10. K-Level 7 whether e-learning champion(s) are promoted .
11. Cost/Benefit Analysis (CBA)
12. Time to Competency
13. Time to Market
14. Return on Expectation
15. AEIOU: Accountability, Effectiveness, Impact, Organizational Context, U = Unintended Consequences

The 4 Levels

- Reaction
- Learning
- Behavior
- Results



Figure 26. How Respondent Organizations Measure Success of Web-Based Learning



Of the 41% the had formal evaluation of e-learning.

Quality on the Line: Benchmarks for Success in Internet-Based Distance Ed

(Blackboard & NEA, 2000)

Other Benchmark Categories:

- Institutional Support: incentive, rewards, plans
- Course Development: processes, guidelines, teams, structures, standards, learning styles
- Course Structure: expectations, resources
- Student Support: training, assistance, info
- Faculty Support: mentoring, tech support
- Evaluation and Assessment: review process, multiple methods, specific standards



Quality on the Line: Benchmarks for Success in Internet-Based Distance Ed (Blackboard & NEA, 2000)

Teaching/Learning Process

- Student interaction with faculty is facilitated through a variety of ways.
- Feedback to student assignments and questions is provided in a timely manner.
- Each module requires students to engage themselves in analysis, synthesis, and evaluation as part of their course assignments.
- Course materials promote collaboration among students.
 - <http://www.ihep.com/Pubs/PDF/Quality.pdf>

Collaborative Behaviors

(Curtis & Lawson, 1997)

- Most common were: (1) Planning, (2) Contributing, and (3) Seeking Input.
- Other common events were:
 - (4) Initiating activities,
 - (5) Providing feedback,
 - (6) Sharing knowledge
- Few students challenge others or attempt to explain or elaborate
- Recommend: using debates and modeling appropriate ways to challenge others



Dimensions of Learning Process (Henri, 1992)

1. Participation (rate, timing, duration of messages)
2. Interactivity (explicit interaction, implicit interaction, & independent comment)
3. Social Events (stmts unrelated to content)
4. Cognitive Events (e.g., clarifications, inferencing, judgment, and strategies)
5. Metacognitive Events (e.g., both metacognitive knowledge—person, and task, and strategy and well as metacognitive skill—evaluation, planning, regulation, and self-awareness)

Surface vs. Deep Posts

(Henri, 1992)

Surface Processing

- making judgments without justification,
- stating that one shares ideas or opinions already stated,
- repeating what has been said
- asking irrelevant questions
- i.e., fragmented, narrow, and somewhat trite.

In-depth Processing

- linked facts and ideas,
- offered new elements of information,
- discussed advantages and disadvantages of a situation,
- made judgments that were supported by examples and/or justification.
- i.e., more integrated, weighty, and refreshing.

Critical Thinking

(Newman, Johnson, Webb & Cochrane, 1997)

Used Garrison's five-stage critical thinking model

- Critical thinking in both CMC and FTF envir.
- Depth of critical thinking higher in CMC envir.
 - More likely to bring in outside information
 - Link ideas and offer interpretations,
 - Generate important ideas and solutions.
- FTF settings were better for generating new ideas and creatively exploring problems.

Social Construction of Knowledge

(Gunawardena, Lowe, & Anderson, 1997)

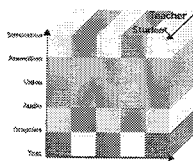
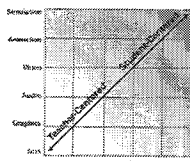
Five Stage Model

1. Share ideas,
 2. Discovery of Idea Inconsistencies,
 3. Negotiate Meaning/ Areas Agree,
 4. Test and Modify,
 5. Phrase Agreements
- In global debate, very task driven.
 - Dialogue remained at Phase I: sharing info

The Sharp Edge of the Cube: Pedagogically Driven Instructional Design for Online Education
Syllabus Magazine, Dec, 2001, Nishikant Sonwalkar

- **five functional learning styles—** apprenticeship, incidental, inductive, deductive, discovery.

■ <http://www.syllabus.com/syllabusmagazine/article.asp?id=5858>



New Methodology for Evaluation: The Pedagogical Rating of Online Courses
Syllabus Magazine, Jan, 2002, Nishikant Sonwalkar

The Pedagogical Effectiveness Index:

- (1) Learning Styles: (see previous page)
- (2) Media Elements: text, graphics, audio, video, animation, simulation
- (3) Interaction Elements: feedback, revision, e-mail, discussion, bulletin

<http://www.syllabus.com/syllabusmagazine/article.asp?id=5914>

For more info, e-mail: Nish@mit.edu

New Methodology for Evaluation: The Pedagogical Rating of Online Courses
Syllabus Magazine, Jan, 2002, Nishikant Sonwalkar

Summative evaluation instrument for rating online courses:

- (1) Content Factors: quality, media, authentic
- (2) Learning Factors: interactivity, testing & feedback, collaboration, ped styles
- (3) Delivery Support Factors: accessible, reporting, user management, content
- (4) Usability Factors: clarity, chunk size, layout
- (5) Technological Factors: bandwidth, database connectivity, server capacity, browser

Dennen's Research on Nine Online Courses

(sociology, history, communications, writing, library science, technology, counseling)



- | | |
|---|--|
| <ul style="list-style-type: none"> ■ Little or no feedback given ■ Always authoritative ■ Kept narrow focus of what was relevant ■ Created tangential discussions ■ Only used "ultimate" deadlines | <ul style="list-style-type: none"> ■ Provided regular qual/quant feedback ■ Participated as peer ■ Allowed perspective sharing ■ Tied discussion to grades, other assessments. ■ Used incremental deadlines |
|---|--|



1. Reflect on Extent of Integration: The Web Integration Continuum
(Bonk et al., 2001)

- Level 1: Course Marketing/Syllabi via the Web
- Level 2: Web Resource for Student Exploration
- Level 3: Publish Student-Gen Web Resources
- Level 4: Course Resources on the Web
- Level 5: Repurpose Web Resources for Others
- =====
- Level 6: Web Component is Substantive & Graded
- Level 7: Graded Activities Extend Beyond Class
- Level 8: Entire Web Course for Resident Students
- Level 9: Entire Web Course for Offsite Students
- Level 10: Course within Programmatic Initiative

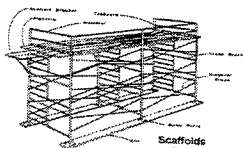
2. Reflect on Interactions: Matrix of Web Interactions

(Cummings, Bonk, & Jacobs, 2002)


- Instructor to Student: syllabus, notes, feedback
- to Instructor: Course resources, syllabi, notes
- to Practitioner: Tutorials, articles, listservs
- Student to Student: Intros, sample work, debates
- to Instructor: Voting, tests, papers, evals.
- to Practitioner: Web links, resumes
- Practitioner to Student: Internships, jobs, fieldtrips
- to Instructor: Opinion surveys, fdbk, listservs
- to Practitioner: Forums, listservs



3. Types of Heavy Scaffolding:







1. Social Acknowledgement
2. Questioning
3. Direct Instruction
4. Modeling/Examples
5. Feedback/Praise
6. Cognitive Task Structuring
7. Cognitive Elaborations/Explanations
8. Push to Explore
9. Fostering Reflection/Self Awareness
10. Encouraging Articulation/Dialogue Prompting
11. General Advice/Scaffolding/Suggestions
12. Management




4. Study of Four Classes

(Bonk, Kirkley, Hara, & Dennen, 2001)

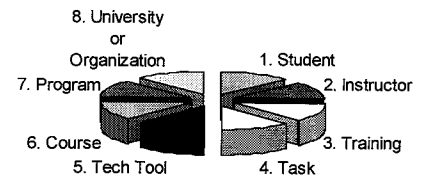
-  **Technical**—Train, early tasks, be flexible, orientation task
-  **Managerial**—Initial meeting, FAQs, detailed syllabus, calendar, post administrivia, assign e-mail pals, gradebooks, email updates
-  **Pedagogical**—Peer feedback, debates, PBL, cases, structured controversy, field reflections, portfolios, teams, inquiry, portfolios
-  **Social**—Café, humor, interactivity, profiles, foreign guests, digital pics, conversations, guests

Evaluation...



My Evaluation Plan...

Considerations in Evaluation Plan




1. Measures of Student Success

(Focus groups, interviews, observations, surveys, exams, records)

- Positive Feedback, Recommendations
- Increased Comprehension, Achievement
- High Retention in Program
- Completion Rates or Course Attrition
- Jobs Obtained, Internships
- Enrollment Trends for Next Semester

1. Student Basic Quantitative

- Grades, Achievement
- Number of Posts
- Participation
- Computer Log Activity—peak usage, messages/day, time of task or in system
- Attitude Surveys



1. Student High-End Success

- Message complexity, depth, interactivity, quality
- Collaboration skills
- Problem finding/solving and critical thinking
- Challenging and debating others
- Case-based reasoning, critical thinking measures
- Portfolios, performances, PBL activities

2. Instructor Success

- High student evals; more signing up
- High student completion rates
- Utilize Web to share teaching
- Course recognized in tenure decisions
- Varies online feedback and assistance techniques



3. Training Outside Support

- Training (FacultyTraining.net)
- Courses & Certificates (JIU, e-education)
- Reports, Newsletters, & Pubs
- Aggregators of Info (CourseShare, Merlot)
- Global Forums (FacultyOnline.com; GEN)
- Resources, Guides/Tips, Link Collections, Online Journals, Library Resources



3. Training Inside Support...

- Instructional Consulting
- Mentoring (strategic planning \$)
- Small Pots of Funding
- Facilities
- Summer and Year Round Workshops
- Office of Distributed Learning
- Colloquiums, Tech Showcases, Guest Speakers
 - Newsletters, guides, active learning grants, annual reports, faculty development, brown bags



RIDIC⁵-ULO³US Model of Technology Use

4. Tasks (RIDIC):

- Relevance
- Individualization
- Depth of Discussion
- Interactivity
- Collaboration-Control-Choice-Constructivistic-Community



RIDIC⁵-ULO³US Model of Technology Use

5. Tech Tools (ULOUS):

- Utility/Usable
- Learner-Centeredness
- Opportunities with Outsiders Online
- Ultra Friendly
- Supportive



6. Course Success

- Few technological glitches/bugs
- Adequate online support
- Increasing enrollment trends
- Course quality (interactivity rating)
- Monies paid
- Accepted by other programs

7. Online Program or Course Budget

(i.e., how pay, how large is course, tech fees charged, # of courses, tuition rate, etc.)

- **Indirect Costs:** learner disk space, phone, accreditation, integration with existing technology, library resources, on site orientation & tech training, faculty training, office space
- **Direct Costs:** courseware, instructor, help desk, books, seat time, bandwidth and data communications, server, server back-up, course developers, postage



8. Institutional Success

- E-Enrollments from
 - new students, alumni, existing students
- Additional grants
- Press, publication, partners, attention
- Orientations, training, support materials
- Faculty attitudes
- Acceptable policies (ADA compliant)

Some General Advice...



Electronic Conferencing: Quantitative Analyses

- Usage patterns, # of messages, cases, responses
- Length of case, thread, response
- Average number of responses
- Timing of cases, commenting, responses, etc.
- Types of contributors/session
 - e.g., percent of instructor contribution
- Types of interactions (1:1; 1: many)
- Data mining (logins, peak usage, location, session length, paths taken, messages/day/week), Time-Series Analyses (trends)
- Surveys on attitudes

Electronic Conferencing: Qualitative Analyses

- **General:** Observation Logs, Reflective interviews, Retrospective Analyses, Focus Groups
- **Specific:** Task Phase & Semantic Trace Analyses, Talk/Dialogue Categories (Content talk, q'ing, peer fdbk, social acknowledgments, off task)
- **Emergent:** Forms of Learning Assistance, Levels of Questioning, Degree of Perspective Taking, Case Quality, Participant Categories

Forms of Evaluation

- Interviews and Focus Groups
- Self-Analysis
- Supervisor Ratings
- Surveys and Questionnaires
- ROI
- Document Analysis
- Data Mining (Changes in pre and post-training; e.g., sales, productivity)

How Collect Data?

- Direct Observation in Work Setting
 - By supervisor, co-workers, subordinates, clients
- Collect Data By Surveys, Interviews, Focus Groups
 - Supervisors, Co-workers, Subordinates, Clients
- Self-Report by learners or teams
- Email and Chat



What Collect Online: Higher Education?

- Email interviews
- Email correspondence
- Computer log data
- Online course transcripts (e.g., asynchronous and synchronous conferencing, webinars, breakouts, conferencing feeds, video streaming)
- Online surveys and questionnaires
- Focus group discussions



Why Collect Online?

- Time and speed of access
- Cost
- Anonymity
- Standardization of format
- Ease of input to analysis tools
- Shareable results (to participants/respondents as well as to other researchers)
- Evaluate learning and link to online gradebook
- Develop benchmarks for measuring performance improvement



Computer Log Data

Chen, G. D., Liu, C. C., Liu, B. J. (2000). Discovering decision knowledge from Web log portfolio for managing classroom processes by applying decision tree and data mine tech. *Journal of Educ Computing Research*, 23(3), 305-332.


- In a corp training situation, computer log data can correlate online course completions with:
 - actual job performance improvements such as
 - fewer violations of safety regulations,
 - reduced product defects,
 - increased sales, and
 - timely call responses.




Ziegler, April 2002, e-Learning

“...the key is not to measure every possible angle, but rather to focus on metrics that are pragmatic and relevant to both human and business performance at the same time.”




Why Conduct Online Surveys

- Formative assessment of courses, training, ideas, or new policies (e.g., how is virtual class going?)
 - Poll opinions on products
 - Increase employee, customer, or learner voice and ownership
 - Involve people from multiple locations, pool ideas
 - Quickly gather answers to questions or updated info
- 

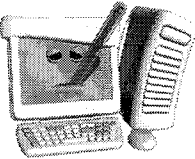
Web-Based Survey Advantages

- Faster collection of data
 - Standardized collection format
 - Easy to answer clicking
 - Wider distribution of respondents
 - Quick results (no waiting for secretary to type up)
 - Cheaper than pen and paper
 - Reusable/shareable survey templates
 - Computer graphics reduced fatigue
- 

Online Survey Tool Features

- Maintain email lists and email invitations
 - Download results to Excel or SPSS
 - Adaptive branching and cross tabulations
 - Modifiable templates
 - Maintain library of past surveys
 - Ability to copy surveys
 - Easy email reminders and thank yous
- 
- 
- 



Web-Based Survey Problems: Why Lower Response Rates?

- Low response rate
 - Lack of time
 - Unclear instructions
 - Too lengthy
 - Too many steps
 - Can't find URL
 - Perceived as aggressive
- 

Web-Based Survey Solutions: Some Tips...

- Send second request
- Make URL link prominent
- Offer incentives near top of request
- Shorten survey, make attractive, easy to read
- Credible sponsorship—e.g., university
- Disclose purpose, use, and privacy
- E-mail cover letters
- Prenotify of intent to survey

Pricing Options

- By # of Respondents
 - Survey Invitees
 - Survey Completions
 - Questions
 - By Month
 - Days Collecting Data
 - By # of Surveys Created
 - Hosted, Intranet, Private Label
- 
- 

Pricing Options

- **Sample Pricing Policies**
 - \$19.95/month for 1,000 respondents from SurveyMonkey
 - First 50 free; \$.20/response in SurveyKey
 - \$1.25/completed survey from SurveyWriter
 - \$449/Survey for 3 months + .05/invitee or \$1,500 + .05/invitee for 12 months from WebSurveyor
 - \$650 for 2,000 respondents from KeySurvey; \$1,450 for 5,000 respondents, and \$2,500 for 10,000

10 Sample Survey Tools (first 5 lower priced)

1. SurveyKey (<http://www.surveykey.com>)
 2. SurveyShare (<http://SurveyShare.com>)
 3. Zoomerang; (<http://www.zoomerang.com>)
 4. SurveyMonkey (<http://www.surveymonkey.com>)
 5. SurveyConsole <http://www.surveyconsole.com/>
-
6. EZSurvey (<http://www.raosoft.com/>)
 7. WebSurveyor (<http://websurveyor.com>)
 8. InfoPoll, (<http://www.infopoll.com>)
 9. SurveyWriter (<http://www.surveywriter.com>)
 10. KeySurvey (<http://www.keysurvey.com/>)

SurveyShare.com

Course

My Recent Research with Online Data Collection

1. KD Online MBA Project (IU)
2. ITT Technical Institute Project
3. Smartweb (ed psych online) Project
4. Future of E-learning Surveys (corp & HE)
5. Future of Blended Learning (corp)
6. TICKIT (teacher training)
7. COW/TITLE (async discussion)
8. Synchronous Conferencing
9. Podcasting (corp)
10. Massive Multiuser Online Gaming (military)

Online MBA Program (Dec. 2003-Present)

- Exploring many aspects of Kelley Direct online MBA program at IU—the only top 20 MBA program that is fully online (includes research on virtual teaming, case-based learning, student and faculty perceptions, asynchronous discussion, instructor roles, technology use, time management, etc.). (Supervised 8-9 people on this project—work includes student and faculty interviews, focus groups, surveys, content analyses, etc.)

Exploring Four Dimensions of Online Instructor Roles: A Program Level Case Study (Liu, Magjuka, & Bonk, in review)

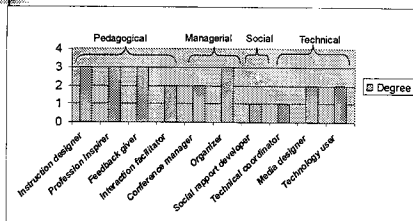


Figure 1. Instructors' preferences for different roles based on interview findings (High priority=3, Medium=2, Low priority=1)

Key Barriers to Online Learning

- **Lack of human interaction:** 33% of respondents think more interactions are needed between student and instructor, and among students.
- **Team schedule issue:** 18% of the respondents expressed the frustration over time zone differences and difficulty of scheduling sync mtg.
- **Lack of sense of community:** 11%. A few students felt lonely due to lack of peer support and lack of a strong network of students.
- **Lack of interactive technology:** 8%; Delayed feedback: 8% Large group size: 7%;
- **Other barriers include** unclear expectations, not enough time for reading, unequal work load distribution, lengthy discussion forum, and lack of lecture.

Strategies Used for Virtual Teaming

| Dimension | Strategies | Courses in use (%) |
|------------------|---|--------------------|
| Task dimension | Team change by each assignment | 2 (7%) |
| | Team discussion | 23 (85%) |
| | Team-level deliverables | 21 (78%) |
| | Internal interaction (critique, feedback, idea sharing) | 9 (33%) |
| | Peer evaluation | 5 (19%) |
| | Combination of teamwork and individual work | 21 (78%) |
| Social Dimension | Online coffee house | 2 (7%) |
| | Online introduction forum | 2 (7%) |
| | Personnel profile | 27 (100%) |
| | Other social events | 5 (19%) |

Strategies Used for Virtual Teaming

| Dimension | Strategies | Courses in use (%) |
|-------------------------|---|--------------------|
| Technological dimension | Email | 26 (96%) |
| | Telephone | 8 (30%) |
| | Text based asynchronous tools (e.g., discussion forums) | 4 (15%) |
| | Text based synchronous tools (e.g., chat) | 5 (19%) |
| | Voice-/visual based asynchronous tools (e.g., voice mail, voice message board) | 0 (0%) |
| | Voice-/visual based synchronous tools (e.g., instant messaging, audio/video conferencing, live meeting) | 0 (0%) |

Summary of Dimensions of Virtual Teams in Online MBA Courses

| | Dimensions of virtual teams | Degree ^[1] |
|-------------------------|--|-----------------------|
| Task Dimension | .Shared purpose of virtual teams | H |
| | .Belief on contribution of knowledge building | H |
| | .Use of task techniques for team activity design | M |
| Social Dimension | .Use of social techniques in virtual teams | M |
| | .Use of human interaction approach | M |
| | .Sharing social presence and cohesion | M |
| Technological Dimension | .Use of text based (a)synchronous tools | H |
| | .Use of audio-and video-based (a)synchronous tools | L |
| | .Usefulness of collaborative tools | M |

[1] H=High, M=Medium, L=Low

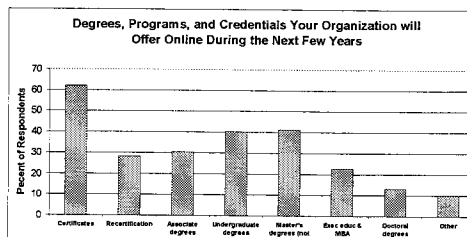
One Word to Describe Program

- 70% were positive!
- Common words were excellent, good, exciting, rewarding, effective, satisfied, enlightening, educational, solid, and empowering.
- About 16% think the program is quite challenging (challenging, intense, demanding, adventure, and hard).
- One student wrote "this is the hardest thing I have ever done."
- New, unique, eye-opening, and surprising.

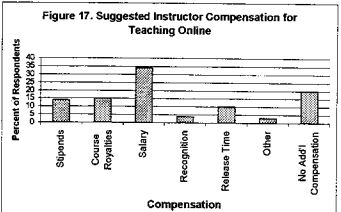
Present State and Future of E-Learning and Blended Learning (2000-Present)

- In process of analyzing new directions in e-learning and blended learning in both higher education and corporate settings in the UK, USA, China, Taiwan, and Korea via survey research (Note: my previous studies explored current state of online learning in higher educ and corporate settings).

Trend 1: Enrollments Growth in Certificates and Short Programs



Myth #1.
Shhh...If you don't say anything, college instructors will just do this for free.



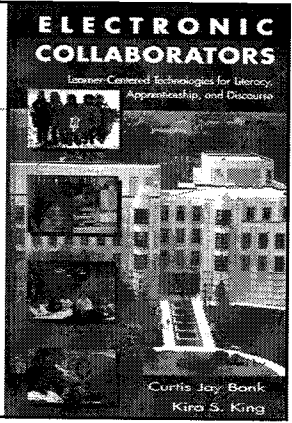
Motivation and Retention in Online Courses (ITT) (Dec 2004 to Present)

- Evaluating the motivational and instructional design aspects of courses on the fully online and hybrid courses at ITT Technical Institute—ITT owns 77 technical institutes across the United States (Supervised 10 people on this project; work includes surveys, interviews, focus groups, content analysis, document analysis, interactivity analysis, etc.).**

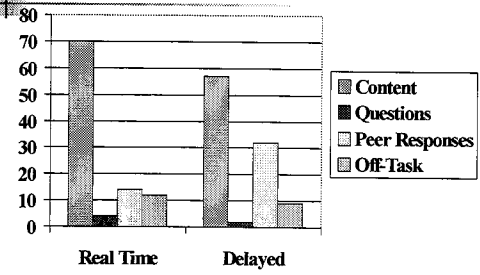
Synchronous and Asynchronous Online Learning (1996 to Present)

- Researching the role of the instructor in synchronous and asynchronous learning environments and the types of online moderation (includes online mentoring and interaction).**

1994-1996 Computer Conferencing and Collaborative Writing (CCCW) Group at Indiana



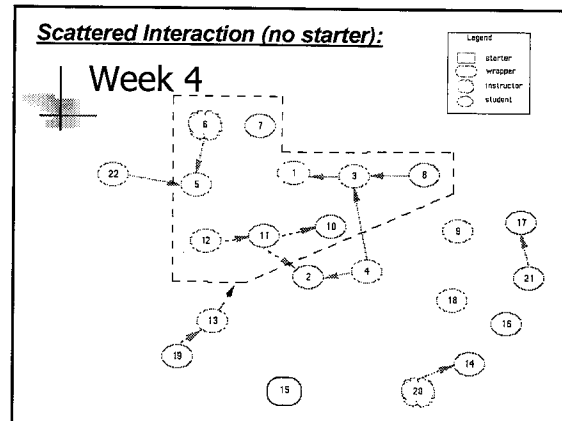
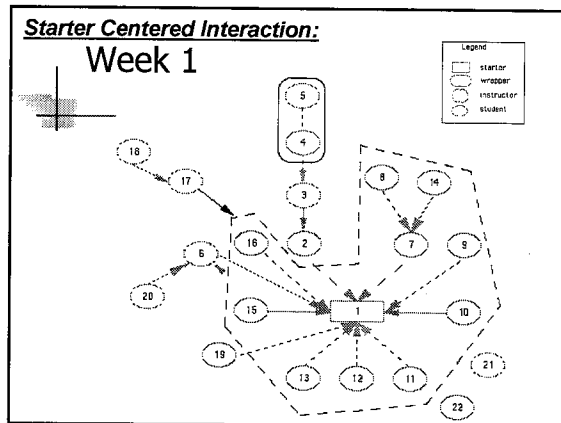
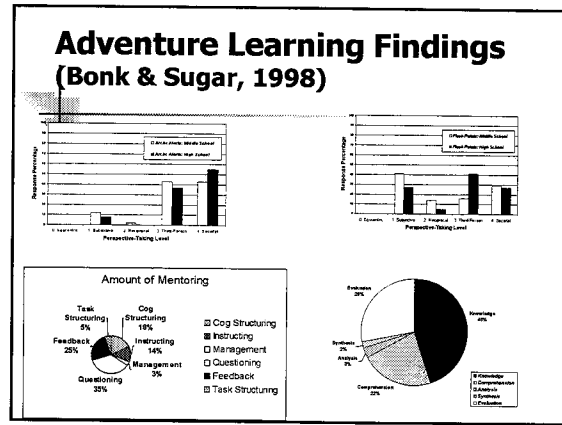
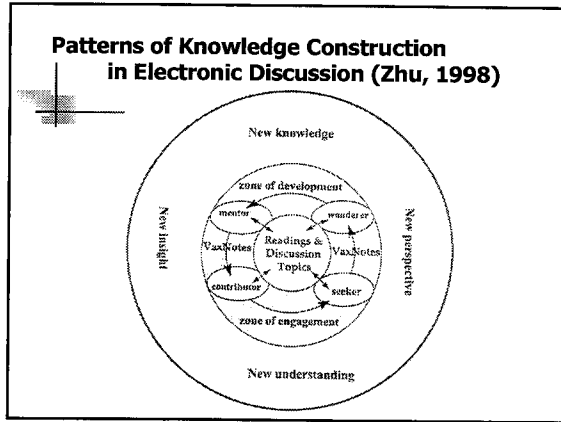
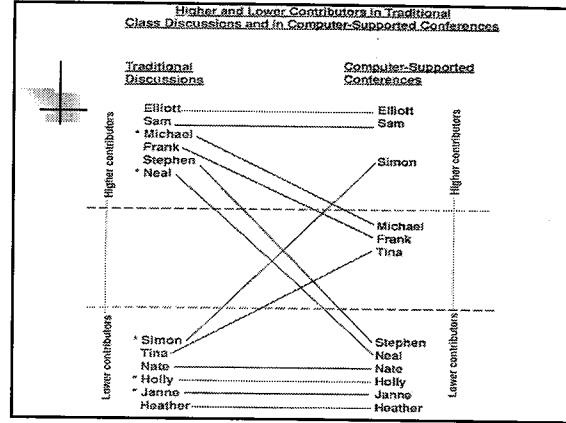
Study #1. 1993-94

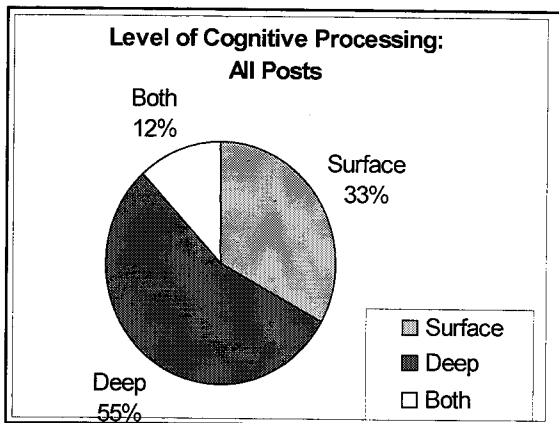
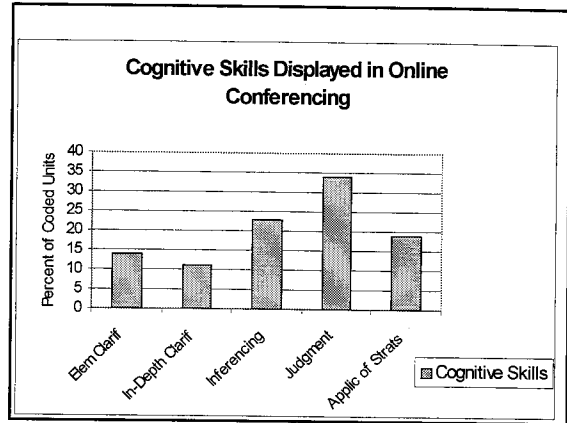
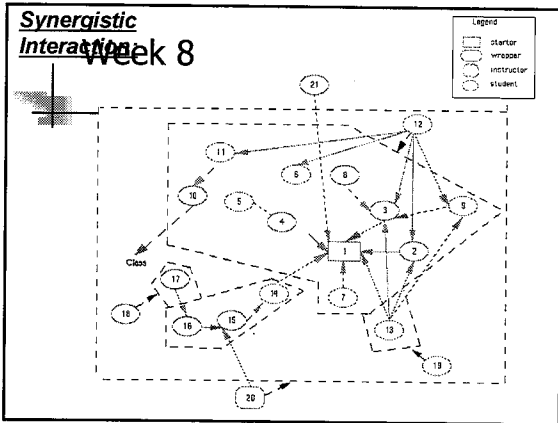


Unjustified Statements (US)



- 24. Author: Katherine**
 Date: Apr. 27 3:12 AM 1998
I agree with you that technology is definitely taking a large part in the classroom and will more so in the future...
- 25. Author: Jason**
 Date: Apr. 28 1:47 PM 1998
I feel technology will never over take the role of the teacher...I feel however, this is just help us teachers...
- 26. Author: Daniel**
 Date: Apr. 30 0:11 AM 1998
I believe that the role of the teacher is being changed by computers, but the computer will never totally replace the teacher... I believe that the computers will eventually make teaching easier for us and that most of the children's work will be done on computers. But I believe that there...





Indicators for the Quality of Students' Dialogue (Angeli, Valanides, & Bonk, 2003)

| ID | Indicators | Examples |
|----|---|--|
| 1 | Social acknowledgement/ Sharing/Feedback | Hello, good to hear from you I agree, good point, great idea |
| 2 | Unsupported statements (advice) | I think you should try this.... This is what I would do... |
| 3 | Questioning for clarification and extend dialogue | Could you give us more info? ...explain what you mean by...? |
| 4 | Critical thinking, Reasoned thinking-judgment | I disagree with X, because in class we discussed.... I see the following disadvantages to this approach.... |

Podcasting (October 2005 to Present)

- Analyzing the use of podcasting in a corporate training setting of IT managers and employees (addressing questions such as how, when, where, and why access podcasting programs, etc.). (surveys and email interviews)

TICKIT (1998 to 2003 and to present)

- Five year investigation of the implementation of the *Teacher Institute for Curriculum Knowledge about the Integration of Technology* which annually trains 25 teachers from 5 rural Indiana schools; exploring long-term impact of inservice technology integration program.

