Time Not Wasted: Stories from Researching and Publishing Classroom Technology Integration Efforts

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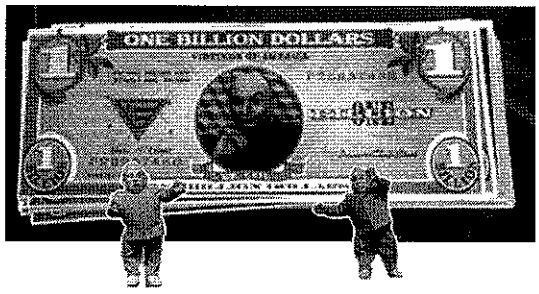
Ok, Million Dollar Question: How can it be win-win?



Time Not Wasted: 30 Ideas and Strategies

1. Network with others at conferences
2. Conduct tech integration brainstorming meetings at lunches and dinners
3. Every time embed new technology, think of research around it
4. Recruit student volunteers
5. Think of conferences to present at

Time Not Wasted: 30 Ideas and Strategies

6. Obtain human subjects on class
7. Listen to students
8. Have students demonstrate technology ideas
9. Share with others in the dept.
10. Plan ahead

Time Not Wasted: 30 Ideas and Strategies

11. Link and build research across classes or semesters
12. Collaborate with former students in other states and countries
13. Collegial mentoring of former students
14. Apply or get nominated for teaching awards
15. Look for mentors and role models

Time Not Wasted: 30 Ideas and Strategies

16. Build time in planner
17. When read about a new technology that is interesting, take note of it
18. Write to others using such technologies (for advice, symposia, etc.)
19. Apply for summer monies to incorporate technologies
20. Look for courses not being researched but have goldmines of data

Time Not Wasted: 30 Ideas and Strategies

21. Look for innovative colleagues
22. Put examples of tech integration at personal Website
23. Make a list of possible journals to publish in (share list with team)
24. Write to the editors of such journals and scan journals
25. Write or edit a book on what you did

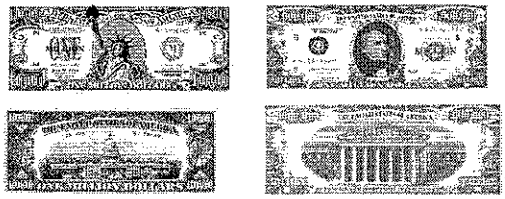
Time Not Wasted: 30 Ideas and Strategies

26. Create model of acronym
27. Attend state and national conferences on teaching (quick vita line items)
28. Reflect on multiple studies and try to make sense of your journey
29. Blog on your pedagogical ideas
30. Read Campus Technology, etc.

Ideas for Resistant, Reluctant, and Hesitant Instructors

- Examples
- Success stories
- Faculty dept discussions
- Recognitions
- Showcases
- Make resources available online
- Make tech integration part of the culture

Ok, Million Dollar Question: How can you get resistant faculty to use technology?



Sources of Faculty Resistance

ION Faculty Trainers - Presentations
January 18, 2002
http://www.ion.illinois.edu/Present/presentations/020118/facrescomments.asp

1. No time
2. Don't want to be forced
3. Concerns about quality
4. Concerns about losing control
5. Competence (fear of technology)
6. Not appropriate for MY discipline
7. Not good online; skepticism
8. Negative perceptions of distance courses
9. Lack of recognition this expands audience
10. Resent resources diverted from trad ed

Sources of Faculty Resistance

ION Faculty Trainers - Presentations
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http://www.ion.illinois.edu/Present/presentations/020118/facrescomments.asp

11. Learning how to teach online takes time
12. Just a fad-this too shall pass
13. Overhearing the frustrations of online faculty
14. Enthusiasts sound like members of a cult
15. Focused on content, no time for technology
16. No appreciation it's an incremental process
17. Marketing responsibilities for online courses
18. Some faculty don't have basic computer skills
19. Threatened by younger faculty
20. Concerns about large classes

Inhibiting Factor List for Distance Ed

Catherine Schifter, Online Journal of Distance Learning Administration, Volume V, Number I, Spring 2002

1. Concern about faculty workload
2. Negative comments made by colleagues about distance ed teaching experiences
3. Lack of training from institution
4. Lack of dept colleague encouragement
5. Lack of release time
6. Lack of professional prestige
7. Lack of technical background
8. Lack of support from dean or chair

Inhibiting Factor List for Distance Ed

Catherine Schifter, Online Journal of Distance Learning Administration, Volume V, Number I, Spring 2002

9. Lack of grants for materials/expenses
10. Concern about quality of courses
11. Lack of technical support from institution
12. Lack of merit pay
13. Lack of support from administrators
14. Lack of monetary support (stipend, overload pay)
15. Concern about quality of students
16. Lack of salary increase
17. Lack of credit toward promotion and tenure

Possible Solutions

ION Faculty Trainers - Presentations
January 18, 2002
http://www.ion.illinois.edu/Present/presentations/020118/facrescomments.asp

1. Staff are there to help them, not to dictate.
2. Promote training/development in dept mtgs
3. Not redesigning their course, but focusing on how to make it work online.
4. Reassure faculty—not perfect the first time
5. Show examples of what DOES work, developed by their peers, not techies.
6. Get them to take small steps (e.g., email)
7. Force faculty members to use technology

How Support Faculty?

- Show and Tell, Tech Fair, Share, Brown Bags,
- Design Web pages to support teaching
- Faculty technology mentor program
- Create resident experts for faculty dev
- Modeling from deans and chairs
- Incentives
  - hardware, software upgrades, new equip priority
  - travel monies
  - discretionary dollars
  - assistance in writing grants for technology

More Support (Rogers, 2000)

- Internal Support:
  - IC, help desk, tech support onsite,
  - small pots of funding, active learning grants
  - summer workshops, colloqs, faculty institutes
  - laptop programs
  - salient on annual reports, encourage research on teaching, include in tenure requirements
- External Support: tech training, courses, certificate, resources, conferences, newsletters, join network (e.g., GEN), consortia

Technology and Professional Development: Ten Tips to Make it Better

(Rogers, 2000, Ed Tech Review)

1. Offer training
2. Give technology to take home
3. Provide on-site technical support
4. Encourage collegial collaboration
5. Send to professional develop conference
6. Stretch the day
7. Encourage research
8. Provide online resources
9. Influence preservice education
10. Celebrate success

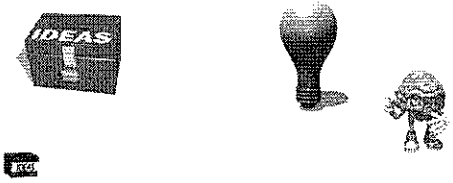
Types of Training
(Rogers, 2000; Ed Tech Review)

- 1:1; just-in-time, help desk
- Small group workshops
- Departmental
- Interactive CBT or WBT
- Tutorials
- Teletraining (distance learning)
- Lunch Bytes
- Faculty Institutes
- Multimedia User Groups
- Mentors

Ten More Ideas from PT3 Grants

1. Conduct needs assessment (Texas A&M, Sonoma St)
2. Involve faculty in planning (UNC)
3. Communicate training opport (Maryland Dept of Ed)
4. Estab tech requirements for tenure (Sonoma St)
5. Develop database of projects (Univ of Houston)
6. Develop partnerships (Wichita State)
7. Provide stipends for participation (Valdosta State)
8. Offer key tech workshops (Indiana State)
9. Create best practice workshops (Niagara University)
10. Encourage student centered model (Univ of SD)

10 More Ideas: How to Support Resistant Faculty



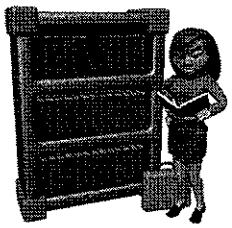
1. Present Enrollment Trends and Projections

2. Make it clear that this will not go away...

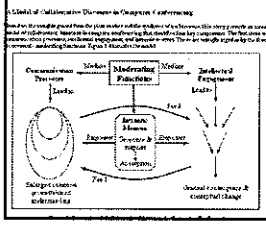
3. Showcase Best Practices

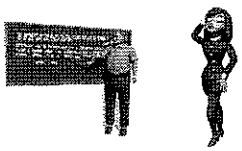
4. Showcase Free Tools as Incentive

5. Convince Them by Summarizing the Research.



6. Develop and Use New Teaching Models and Frameworks





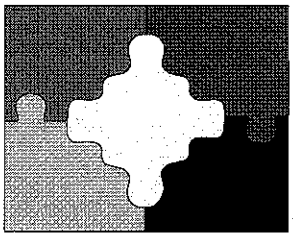
7. Find Incentives that Work

8. Create a Portal and Online Help System

9. Offer Portals, Certificates, Institutes, and Degrees

10. Share Pedagogical Strategies that Can Implement Immediately

Multiple Pieces to this Story



Areas of Current Research

1. Wikibook creation and ownership
2. Apprenticeship in Wikibooks and Wikipedia
3. Open source movement in North America and China
4. Synchronous instruction with Breeze
5. Blended learning in corp trng in 5-6 countries
6. Development of online communities in online MBA program
7. Virtual teaming and case learning in online MBA program
8. Creativity and collaboration in online art and design program called Omnium
9. Motivation in online environments
10. Delphi study of blended learning experts on collaboration in blended learning

My Research Interests

- **Professional Interests:** Nontraditional/informal learning and distance education; Web-based training and teaching; blended learning, online mentoring, interactive learning environments; collaborative learning tools; online learning communities; adult education; problem-based learning; learning in a social context; collaborative writing technologies; alternative instructional strategies; future learning technologies.

Sociocultural Ideas

(Bonk & Cunningham, 1998)

1. Shared Space and Build Intersubjectivity
2. Social Dialogue on Authentic Problems (mind is in social interactions and extends beyond skin)
3. Mentoring and Teleapprenticeships
4. Scaffolding and Electronic Assistance in ZPD
5. Group Processing and Reflection
6. Collaboration and Negotiation in ZPD
7. Choice and Challenge
8. Community of Learning with Experts & Peers
9. Portfolio Assessment and Feedback
10. Assisted Learning (e.g., task structuring)
11. Reciprocal Teaching & Peer Collaboration

Cognitive Apprenticeship

- Learners should be acculturated into an established community of practice. This is done through guided participation, scaffolding, and a gradual transfer of responsibility for the learning from the more experienced partner to the learner.

Scaffolding in one's ZPD

(Robert Slavin, 1993)

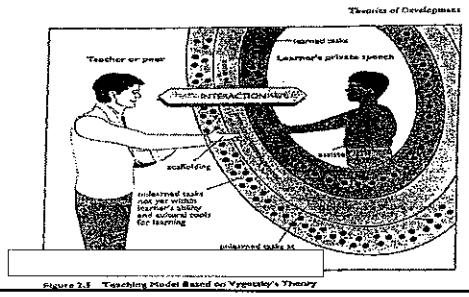


Figure 2.5 Teaching Model Based on Vygotsky's Theory

10 Stories over 15 Years

1. 1993-1994: Peace, dude, hop off the return key, save me some stress."
2. 1995: What if Vygotsky had lived to 100...
3. 1996: Do not ride your bike to work.
4. 1997: Look out for the Russians...
5. 1998: Do you believe in the power of sharing?
6. 2001: You were in, but you were never there.
7. 1998-2005: Who needs a TICKIT?
8. 2004-2006: Data at your fingertips.
9. 2006-2007: A synchronous life is a Breeze.
10. 2006-2007: Where is a Wikibookian when you need one?

Story #1 (1994): "Peace, dude, hop off the return key, save me some stress."

Taxonomy: Level of Collaborative Tool

(Bonk, Medury, & Reynolds, 1994)

Level 0: Stand Alone Tools
Level 1: E-mail and Delayed Messaging Tools
Level 2: Remote Access/Delayed Collab Tools
Level 3: RT Dialoguing and Idea Gen Tools
Level 4: RT Collaboration (text only)
Level 5: Cooperative Hypermedia
Level 6: Tools That Don't Fit Nicely

Web Conferencing Tools

- VaxNOTES
- NiceNet
- WebCrossing
- Sitescape Forum
- COW
- FirstClass
- WebCT, Blackboard, Virtual U, etc.

Research on Electronic Cases

1. RT vs. Delayed Collab
   - Groups Preset by Major
   - Tchr Generated Cases
   - Local/Univ. Networks
   - Limited Instructor Mentoring
2. Web-Based Conference
   - Grps Formed on Interest
   - Student Gen. Cases
   - World Wide Web
   - Extensive Instructor and Peer Mentoring

Study #1: 1993/1994

(Bonk, Hansen, Grabner, Lazar, and Mirabelli, 1998)

- Two Semester: VAXNotes vs. Connect
- Two Conditions: (1) Real-time vs. (2) Delayed
- Subjects = 65 secondary ed majors
  (5 grps: PE, Foreign Language, Social Studies, English, Math)
- Mentors = limited instructor commenting
- Procedures:
  - (1) Respond to 4 cases in small groups
  - (2) Respond to peer comments

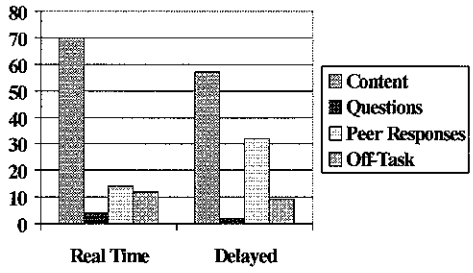
Research Questions: Study #1

1. What social interactions occur in real-time & delayed?
2. How code electronic social interaction patterns?
3. How do case size & complexity affect grp processing?
4. Do RT or delayed foster > discuss depth & quality?
5. Do shared experiences stimulate grp intersubjectivity?

Some Findings From Study #1

- Delayed Collab > Elaboration
  - 1,287 words/interaction vs. 266 words/interaction
- RT Collab > Responses
  - 5.1 comments/person/case vs. 3.3 comments/person
- Low off-task behaviors (about 10%)
- Rich data, but hard to code
- Students excited to write & publish ideas
- Minimal q's and feedback
- Interaction inc. over time; common zones
- Some student domination

Study #1. 1993-94



Example of real-time dialogue:

- Come on Jaime!! You're a slacker. Just take a guess. (October 26, 1993, Time: 11:08:57, Ellen Lister, Group 5).
- How might he deal with these students? Well, he might flunk them. He might make them sit in the corner until they can get the problem correct...I don't know. (Um...hello...Jaime where is your valuable insight to these problems?) (October 26, 1993, Time: 11:19:37, Ellen Lister, Grp 5).

Example of Delayed Dialogue:

Joyce's new system offers a wide variety of assessment forms. These different forms complement the diverse learning and test taking abilities of her students. Joyce seems to cover the two goals of classroom assessment with her final exam--to increase learning and increase motivation. Students will increase their learning because they will not just remember information to re[g]urgitate on an exam, but instead they will store these items in their long-term memory and later may be able to make a general transfer. Joyce will increase student motivation because she has deviated from the normal assessment method expected by her students.

Joyce's test will probably be both reliable and valid considering that she implemented three different forms of tests. Joyce's test also might reduce test anxiety. If her students know what to expect on the test (they even wrote the questions) they more than likely will be less anxious on exam day... (January 31, 1994, Time: 19:28, Sarah Fenway, Language Group.)

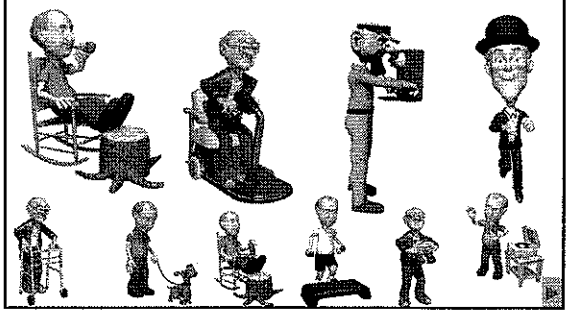
Larry

- Entertaining,
- Creative and controversial,
- Indirectly intimidating,
- One who set own agenda,
- Very articulate and witty.

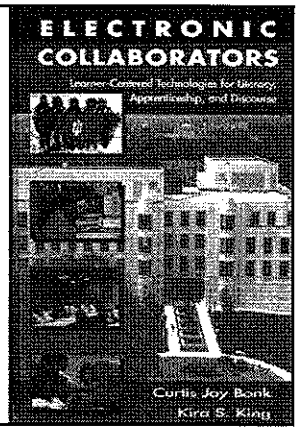
Sample of Larry's Comments....

- "Peace, dude, hop off the return key, save me some stress."
- "I am currently preparing my anti-groupwork support group."
- "I've noticed several people writing and saying that they would have done this or that brilliant or intuitive thing. I personally am brilliant or intuitive and I think other could use a little humility. This Karen's made some mistakes, but we all make mistakes, and when (dare I say), we are in her shoes, we should expect to make some of the same ones that confound her."

Story #2 (1995): What if Vygotsky had lived to 100...?



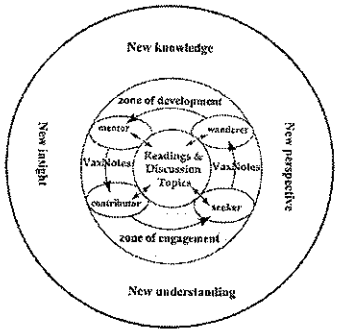
1994-1996 Computer Conferencing and Collaborative Writing (CCCW) Group at Indiana



Sample Projects

1. Peer scaffolded support with technology.
2. Critical thinking with tech supports.
3. PBL situations and role play
4. Scaffolded learning from the Arctic.
5. Forms of online e-mail assistance.
6. Bring experts to teach at any time.
7. Online case learning and exam preparation.
8. Alternating class and online activities.
9. Roles in electronic discussions.
10. Structure electronic role play.

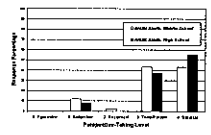
Patterns of Knowledge Construction in Electronic Discussion (Zhu, 1998)

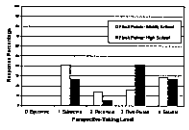


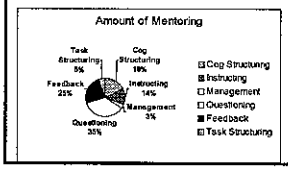
Adventure Learning

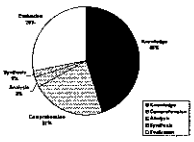
Purpose: engage in adventurous study of the global environment. (e.g., Telepresence or virtual fieldtrips, ask an expert forums, cross-classroom collaboration, debate forums, online communities, MayaQuest, the Jason Project)

Adventure Learning Findings (Bonk & Sugar, 1998)

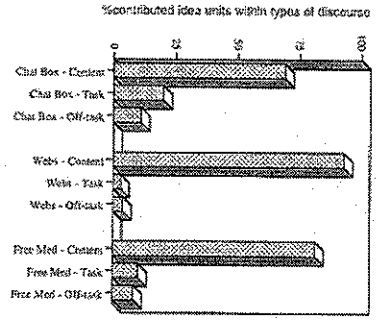








Aspects within Aspects (Cooney, 1998)

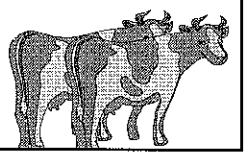


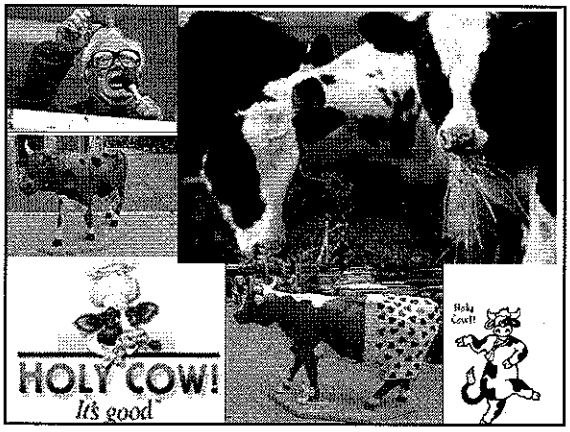
Implications: Build Courses Based on Sociocultural Principles (Bonk, 1998)

Smartweb Activities	Sociocultural Link
• Weekly Chapter Activ	• Connect to Experience
• Starter-Wrapper Disc	• Recip Teach & Dialogue
• Personal Profiles	• Build Intersubjectivity
• Student Portfolios	• Dynamic Assessment
• Feedback on Portfolios	• Scaffolding within Zones
• Links Prior Semesters	• Modeling and Legacy
• Field Reflections	• Apprentices Learning
• Field Observ Case Disc	• Scaffolded & Authentic
• Café Latte	• Shared Knowledge

Story #3 (1996): Do not ride your bike to work.

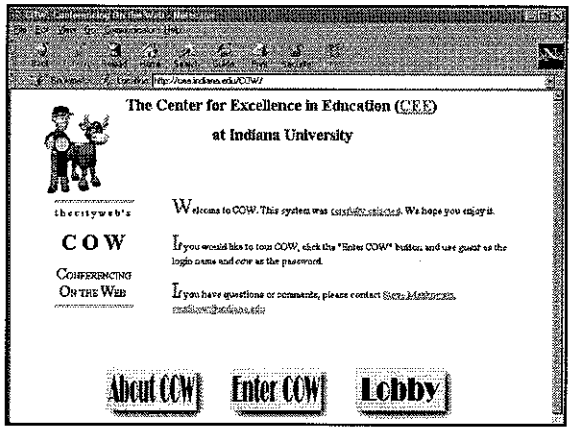
Conferencing On Web (COW)
(1996-2000)
Three Basic Levels:
1. Conference (public or private)
2. Topic (e.g., special education)
3. Conversation (e.g., reading rewards)

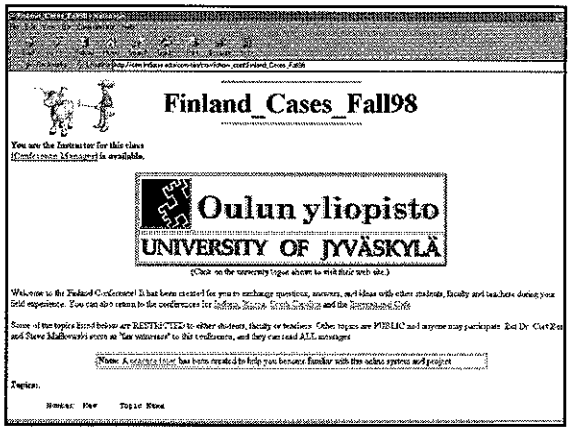


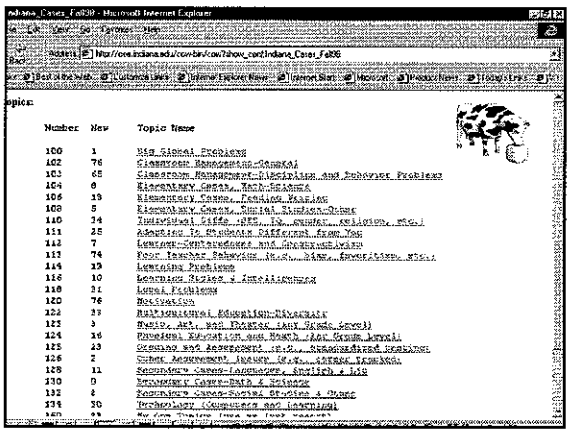


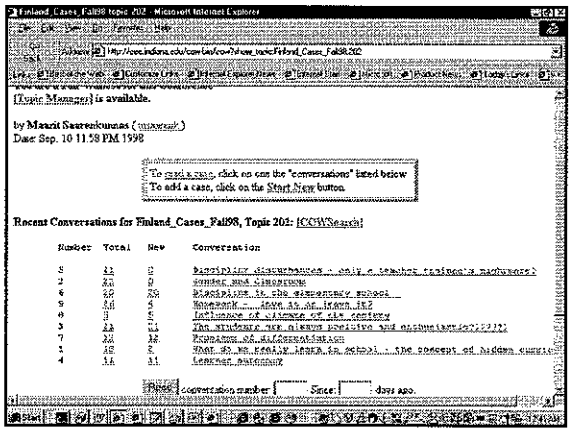
Purpose of COW Project

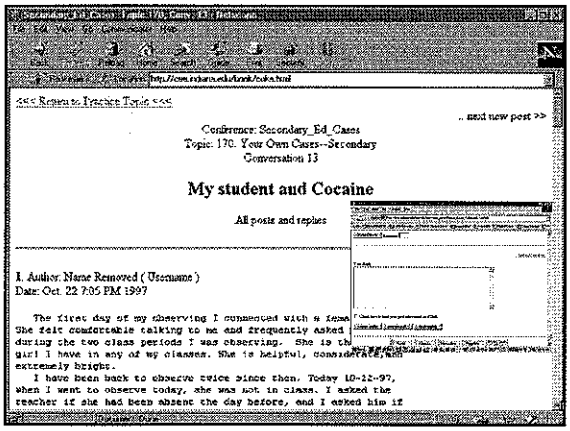
- Students in field experiences write cases
- Teachers and students from around the world provide electronic mentoring
- Authentic cases and mentoring transform learning environment
- Helps preservice teachers understand the role of technology in education











Problems Solved By COW

- **Student isolation in field experiences**
- **Lack of community/dialogue among teacher education participants**
- **Disconnectedness between class and field experience**
- **Limited reflective practices of novice teachers**
- **Need for appreciation of multiple perspectives**

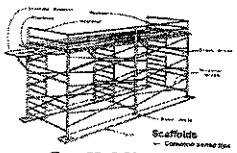
Quantitative Methods

Average results for prior to TITLE (TITLE):

- **Participants per semester: 130 (>300)**
- **Cases per semester: 230 (624)**
- **Cases per student: 1.75 (same 1.80)**
- **Average responses per case: 4.5 (3.9)**
- **Average words per case: 100-140 (198)**

Frequent Case Topics

Topic	Number of Cases
Management	312
Motivation	185
Instructional Approaches	178
Individual Differences (special education and gifted)	152
Hot Topics (e.g., teacher burnout, violence in school, corporal punishment, and drugs and alcohol)	83
Development (physical, cognitive, and social/emotional)	70
Behaviorism and Social Learning Theory	57



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

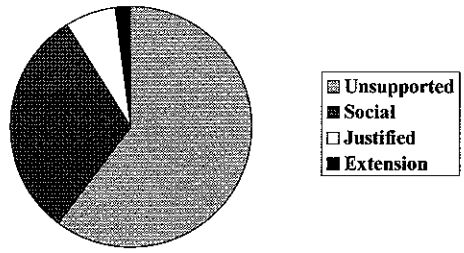
Bonk, Angeli, Malikowski, & Supplee, 2001)

Transcript Results

A. Peer Content Talk
- 31% Social Acknowledgments
- 60% Unsupported Claims and Opinions
- 7% Justified Claims
- 2% Dialogue Extension Q's and Stmts

B. Mentor Scaffolding
- 24% Feedback, Praise, and Social
- 24% General Advice and Suggestions
- 20% Scaffolding and Socratic Questioning
- 16% Providing Examples and Models
- 8% Low Level Questioning
- 8% Direct Instruction & Explanations/Elab

Study #3. Fall, 1997



Bonk, Malikowski, Supplee, & Angeli, 1998

Overall Major Findings

- **COW enhanced student learning**
  - provided a link between classroom and field; connected to textbook concepts
  - encouraged learning about technology
- **COW extended student learning**
  - students got feedback from multiple sources and outside their community
  - students saw international perspective
- **COW transformed student learning**
  - students took ownership for learning
  - students co-constructed knowledge base

Qualitative Themes Continued...

- **Students were attracted to cases that...**
  - had interesting titles
  - were on familiar topics
  - were on controversial topics
  - they had opinions about
- **Peer feedback was appreciated but not deep**
- **Mentor feedback was apprec. & motivating**

Study: COW, Spring 1998

(Bonk, Malikowski, Supplee, & Dennen, 2000)

- **Two Month Conference (One Condition)**
  - 3 discussion areas (IU, Finland, and Cultural Immersions)
- **Subjects = 110 students**
  (80 US and 30 Finnish students)
- **Mentors = 2 AIs, 1 supervisor, 4 coop tchrs, 3 conference moderators.**
- **Videoconferences + Web Conferences**

Finnish Cases Were Longer and more Reflective and Often Co-Authored...

Lets consider a math class in an elementary school as an example. Often a teacher teaches the new subject area and after that pupils practice counting those exercises. When a pupil has finished s/he receives extra exercises, or s/he is asked to do some work in other subjects but s/he is not allowed to continue further in the math book. Should the pupil be allowed to continue further on her/his own if s/he wants to? There is a danger that if s/he continues s/he will make more mistakes than if s/he waits until the teacher has taught the next step in the subject area. However, is it dangerous to do mistakes? Do teachers suppose that outside school there is always someone to tell what to do and how to do it in a right way?

Marya Ford Washington states in her summary: "It is painful to consider that a good portion of America's gifted and talented students spend most of their elementary and middle school careers learning to be average. It is even more painful to admit that they usually succeed." The same seems to apply to Finland. How could we solve this problem? Maarit & Maija

Vertical Mentoring Examples

9. Author: Jerry Cochey (Mentor)
Date: Mar. 11 1:46 PM 1998

To shift from teacher centered classrooms to child centered classrooms and learning takes time, patience and a commitment to the idea that students are responsible for their own learning. Even in this age of enlightenment(?), we think that a quiet, teacher controlled classroom shows learning, while research shows that active, talking, sharing of learning experiences with peers is more productive. Be patient, it takes a long time to have students change to being responsible for their own.

Horizontal Finnish Mentoring

12. Author: Leena Date: Mar. 30 11:52 AM 1998

This case is something I feel very close to. I have been trying struggle with finding ways to be a teacher in a new way, trying to think everything from the students' perspective, to challenge my own old traditions of teaching and try to seek ways which the I could find ways of studying things together with the students. What really puzzles me is that these different "projects" have had such extremely different lives.....What I really don't know yet is how to be a proper supporter of these processes for students... - Leena

Justified Statement (Finnish)

3. **Author:** Kirsi

Date: Mar. 6 8:11 AM 1998

Why not let the student study math further by himself and the teacher could help him whenever the teacher has time. At least some of the math study books **are so designed that one page has examples that teach you how to solve the problem and then on the next page there are exercises.** I personally **hate being said 'wait' since when I'm interested in something I want to go on and learn more and not wait. This way** I think **the child learns to be responsible of his own learning.** If I **quote dear mr Vygotsky** here again, the teacher should be sensitive to see where the child's proximate zone of development is and to help him 'over' it. The teacher's task is not to try to keep the child on the level he has reached but to help him learn more if he is interested...

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 with all the technological advances that will be to come but I don't believe that it could actually take over the role of a teacher...but in my opinion will never take over the role of a teacher.

25. Author: Jason
Date: Apr. 28 1:47 PM 1998

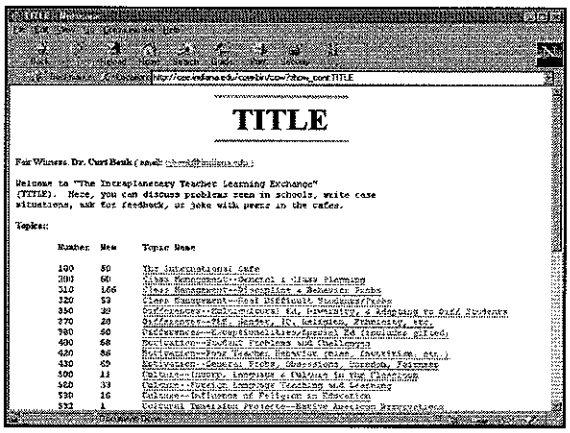
I feel technology will never over take the role of the teacher...I feel however, this is just help us teachers out and be just another way for us to explain new work to the children. No matter how advanced technology gets it will never be able to...

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 will always be the need for the teacher.

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

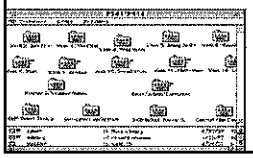
ID	Indicators	Examples
1	Social acknowledgement/ Sharing/Feedback	Hello, good to hear from you...I agree, good point, great idea
2	Unsupported statements (advice)	I think you should try this....This is what I would do...
3	Questioning for clarification and extend dialogue	Could you give us more info? ...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....



Caseweb Visions

- Intros, Expert Commentaries, Reviews
- Expanded and Shrunken Case Views
- Hyperlink Options
- Conceptual Labels—chapters, themes, ideas
- Role Taking Options
- Mentoring Scaffolds/Questions
- Forced Counterpoints
- Sample Mentor and Peer Feedback
- Case Comparison Statistics

Story #4 (1997): Look out for the Russians...



Spring of '97 (FirstClass)

Content Analysis of Online Discussion in Ed Psych (Hara, Bonk, & Angeli, 2001, Instructional Science)

Purpose and Questions of this Study

- To understand how graduate students interact online?
- What are inter patterns with starter-wrapper roles?
- What is role of instructor in weekly interactions?
- How extensive is social, cog, metacog commenting?
- How in-depth would online discussions get?
  - And can conferencing deepen class discussions?

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)

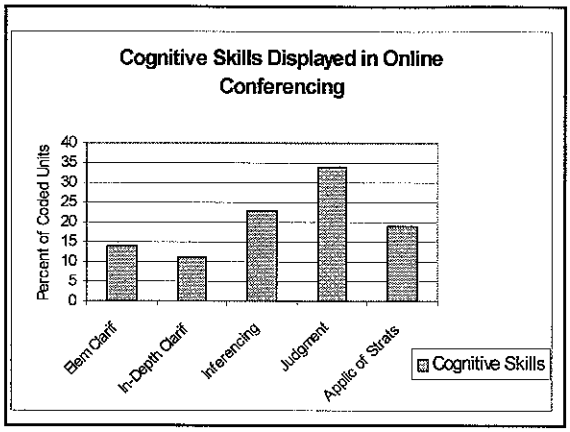
Graduate Course Findings

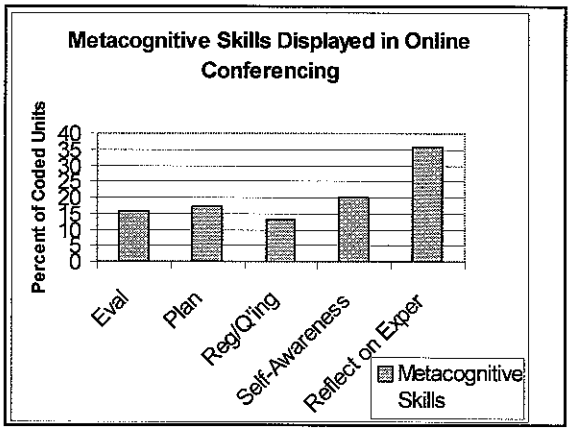
- **Participation**
  - +Most participated once/week
  - +Student-centered & depend on starter
  - +Posts more interactive over time
  - +Lengthy & Cognitively Deep
    - Ave post: 300 words & over 18 sentences
    - From 33 words to over 1000 words
  - – Some just satisfied course requirements

Findings Continued

(see Henri, 1992)

- **Social** (in 26.7% of units coded)
  - – social cues decreased as semester progressed
  - – messages gradually became less formal
  - – became more embedded within statement
- **Cognitive** (in 81.7% of units)
  - – More inferences & judgments than elem clarifications and in-depth clarifications
  - – Cog Deep: 33% surface; 55% deep; 12 both
- **Metacognitive** (in 56% of units)
  - – More reflections on exper & self-awareness
  - – Some planning, eval, & regulation & self q'ing





Surface vs. Deep Posts

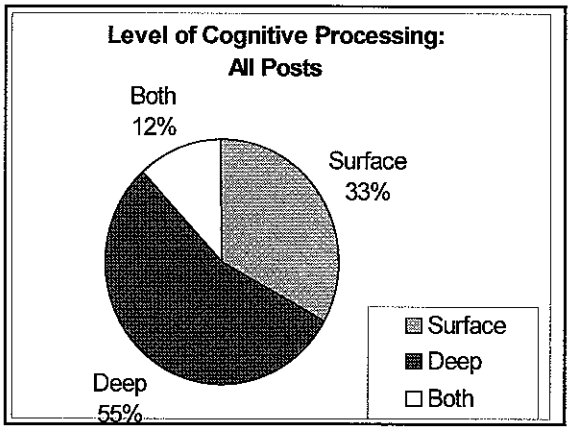
(Henri, 1992)

Surface Processing

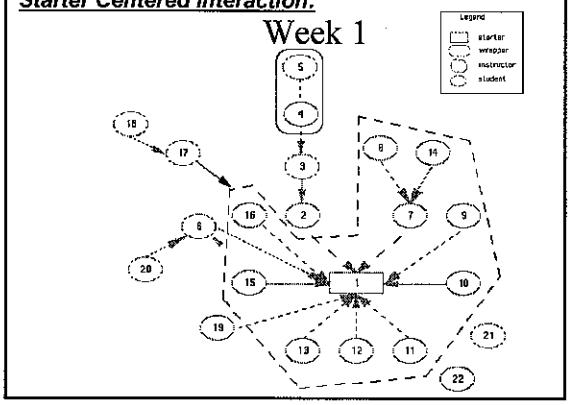
- making judgments without justification,
- stating that one shares ideas or opinions already stated,
- repeating what has been said
- asking irrelevant questions
- i.e., fragmented, narrow, and somewhat trite.

In-depth Processing

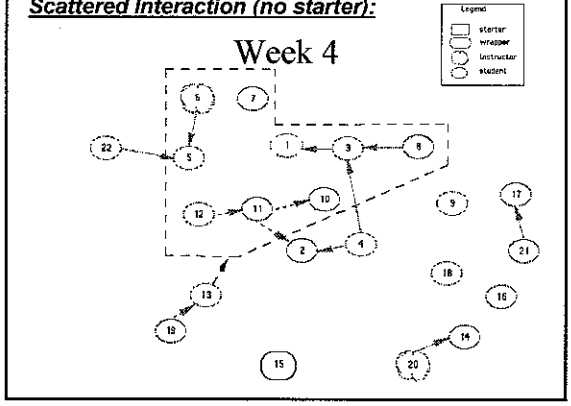
- linked facts and ideas,
- offered new elements of information,
- discussed advantages and disadvantages of a situation,
- made judgments that were supported by examples and/or justification.
- i.e., more integrated, weighty, and refreshing.



Starter Centered Interaction:

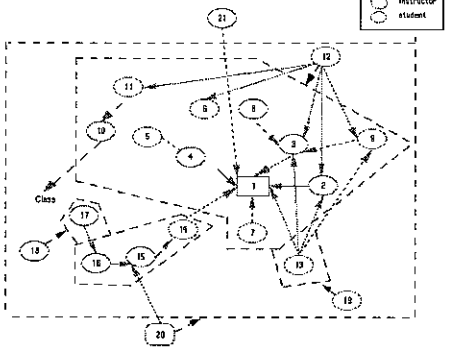


Scattered Interaction (no starter):



Synergistic Interaction:

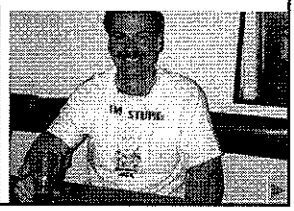
Week 8



Recommendations

- **Structure online discussions**
  - **e.g., get them to use subject line better.**
- **When done, have them print out transcripts!**
  - **Can take the class with them when done!**
- **Realize that diff conferencing software and features serve diff instructional purposes**

Story #5 (1999): Do you believe in the power of sharing?



1999 Study of the World Lecture Hall Matrix of Web Interactions

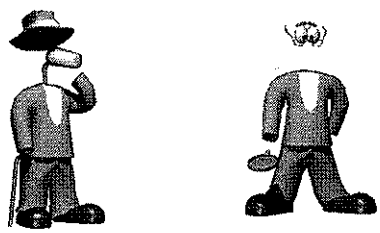
(Cummings, Bonk, & Jacobs, 2002)

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

Table 2
Percent of online syllabi with different options for communication flow among instructors, students, and practitioners/experts

	To students	To instructors	To practitioners/experts
From instructor	Assignment schedule (70%) Class roster (10%) Lecture notes/PowerPoint slides (43%) Web links (70%) Instructor profiles (70%)	Online syllabi (100%) Web forums or discussions on course material (4%) Lecture notes/activities (43%)	Online tutorials (3%) General information (1%)
From students	Post or publish current student work (14%) Within-course discussions or electronic conferences (65%) Outside of course discussions (5%) Personal profiles (10%)	Journal reflections (6%) Online quizzes/tests (38%) Reflective electronic minute papers (0%) Session evaluations (3%) Instructor email feedback (84%)	Web links (13%) Resumes on the Web (0%)
From practitioners/ experts	Jobs (0%) Virtual field trips (5%)	Course feedback (0%)	Virtual professional development communities (0%)

Story #6 (2001): You were in, but you were never there.



Cross-Cultural Comparisons of Online Collaboration Among Pre-Service Teachers in Finland, Korea, and the US

Kim, K. J., & Bonk, C. J. (2002). Cross-cultural comparisons of online collaboration among pre-service teachers in Finland, Korea, and the United States. *Journal of Computer-Mediated Communication, 8*(1), see http://www.ascusc.org/jcmc/vol8/issue1/kimandbonk.html.

Sample & Data Sources

- **In Spring 1998:**
  - **Finland: 30 students and 5 instructors**
  - **USA: 88 students and 7 instructors**
- **In Fall 1998**
  - **Korea: 21 students and 1 instructor**
- **A content analysis using Curtis & Lawson's coding scheme to describe utterances in online collaboration.**
  - **Post collaboration questionnaire, interviews, video conference**

Behavior Categories	Codes	Description
Planning	GS	Group Skills
	OW	Organizing Work
	IA	Initiating Activities
Contributing	HeG	Help Giving
	FBG	Feedback Giving
	RI	Exchanging Resources and Information
	SK	Sharing Knowledge
	CH	Challenging Others
	EX	Explaining or Elaborating
Seeking Input	HeS	Helping Seeking
	FBS	Feedback Seeking
	Ef	Advocating Efforts
Reflection/ Monitoring	ME	Monitoring Efforts
	RM	Reflection on Medium
Social Interaction	SI	Social Interaction

Online Collaboration Behaviors by Categories

Behavior Categories	Conferences (%)		
	Finland	U.S.	Average
Planning	0.0	0.0	0.0
Contributing	80.8	76.6	78.7
Seeking Input	12.7	21.0	16.8
Reflection/ Monitoring	6.1	2.2	4.2
Social Interaction	0.4	0.2	0.3
Total	100.0	100.0	100.0

Online Collaboration Analysis (Korea)

Behavior Categories		Korean	
		Code totals	Code percent
Planning	GS	0	0
	OW	0.0	0.0
	IA	0	0
Contributing	HeG	2	2
	FBG	1.3	1.3
	RI	44	44
	SK	28.4	28.4
	CH	2	2
	EX	1.3	1.3
Seeking Input	HeS	1	1
	FBS	0.6	0.6
	Ef	36	36
Reflection/ Monitoring	ME	3	3
	RM	1.9	1.9
Social Interaction	SI	15	9.7
Total		155	100.0

← Sharing Knowledge

← Advocating efforts

← Social Interaction

Findings from the Quantitative Analysis

- **Low participation rate of instructors across all the groups.**
  - **A majority of utterances fell into the "contributing" category.**
  - **Cross-cultural differences in "Seeking Input," "Reflection/ Monitoring," and "Social Interaction" behaviors.**
  - **Differences in the intercultural participation levels across cultures.**

Differences in Reflection Behaviors (monitoring effects)

- A Finnish case on student motivation (ME)

"As a result of this discussion so far, we have made some conclusions dealing with students' motivation to learn. We agree that it is impossible to motivate students deliberately. There is not any specific act that can be used to increase students' motivation. According to McCombs, almost everything that teachers do in the classroom has a motivational influence on students ... Intrinsic motivation and self-regulation strategies are also important and these can be supported by successful external supports...."

Differences in Feedback Seeking & Giving

- A U.S. case on disciplinary problems (FBS)

"One day I come into teach the class and one of the twenty students is very quiet. He seemed alright at the time of teaching, but towards the end he just starts crying for no reason... The questions that were raised in my head were: 1. How involved should I get?, 2. Should I call the family and tell them what happened?, 3. Should I tell the other teachers and see what we all can do?"

Differences in Social Interaction Behaviors

- Social Interactions Among Korean students

- Well, like a cup of coffee, may this new thing be relaxing (I am praying now). It must be the beginning, so I am happy now. I wonder whether someone would reply to me. I am a little bit nervous 'cause I am not so familiar with Web conferencing.

- Sister Sunny, take care of yourself, and I hope your health will be good soon. I'm not accustomed to Web conference, either, but it is a good chance to participate. Please, cheer up!

- Thank you for your interest in my health, but I'm all right now. Just before, my long message to you has gone by my slight mistake, so I am sad (crying). And, sorry for my late reply to you.

Communication Styles & Culture

- Low context communication
  - Focuses on explicit verbal message
  - U.S. Finland, and most of the Western cultures
- High context communication
  - emphasizes how intention or meaning is conveyed through the context (e.g., social roles, positions, etc.)
  - Korea and most of the Asian cultures
- Importance of social interaction in the high context communication culture

Findings from the Qualitative Analysis

- U.S. students more action-oriented and pragmatic in seeking results or giving solutions.
- Finnish students were more group focused as well as reflective and theoretically driven.
- Korean students were more socially and contextually driven.

Implications

- Instructors have a key role in facilitating effective cross-cultural communication (e.g. social interaction activities for students from high context cultures).
- Instructional designers and software developers need to build learning tools that address learner needs from different cultures (usability tests in different cultures.
- Online learners need prior examples or case transcripts highlighting cultural differences in communication styles.

Story #7 (1998-2005): Who needs a ticket?

The Pedagogical TICKIT: Teacher Institute for Curriculum Knowledge about the Integration of Technology (1998-2003)

Curt Bonk
Lee Ehman
Emily Hixon
Lisa Yamagata-Lynch
John Keller
Indiana University

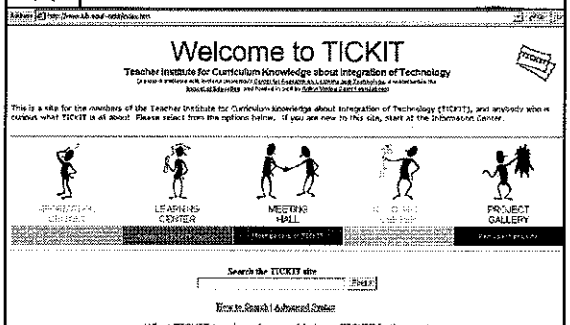
TICKIT (1998 to 2003 and to present)

- **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.**

TICKIT Team

1. **Dr. Lee Ehman, IU, C&I Dept.**
2. **Dr. John Keller, IUPUI**
3. **Dr. Emily Hixon, IU Northwest**
4. **Dr. Lisa Yamagata Lynch, Univ of Northern Illinois**
5. **Timothy Hew, IU, IST Dept.**
6. **me**

TICKIT Program Features



TICKIT Goals

- **Knowledge, skill, & confidence**
- **Thoughtful integration of technology**
- **Leadership cadres in schools**
- **Link schools and university**
- **Help schools capitalize on their technology investments**

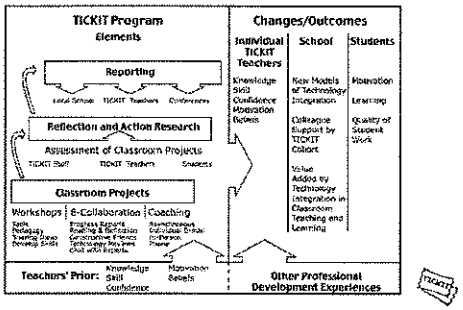
TICKIT Teachers

Goal Statement

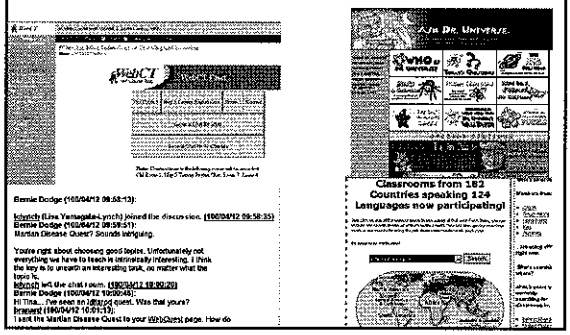
"Obviously, I'm technologically in the Dark Ages. My students are so computer savvy that I feel I must at least attempt to catch up with them." – Debbie White, North Gibson, summer 2002

North Gibson School Corporation

TICKIT Model



Online Interaction



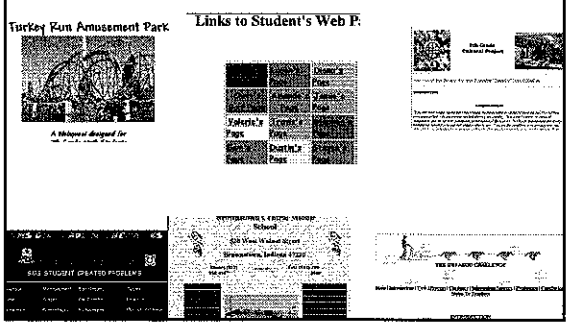
Typical TICKIT Training and Projects

Web: Web quests, Web search, Web edit/pub.
- **Includes class, department, or school website.**

- **Write: Electronic newsletters, book reviews.**
- **Tools: Photoshop, Inspiration, PowerPoint.**
- **Telecom: e-mail with foreign key pals.**
- **Computer conferencing: Nicenet.org.**
- **Digitizing: using camera, scanning, digitizing.**
- **Videoconferencing: connecting classes.**
- **Web Course: HighWired.com, MyClass.net, Lightspan.com, eBoard.com**

Project type	Number of projects (132)
Webquest	64
Electronic newsletters	1
Web editing & publishing	13
Online conferencing, collab, and discussion (includes email and phone)	10
Virtual tours	1
Computer apps (Excel, PP, Word, Internet)	38
Book review	2
Brochure construction	1
Electronic portfolio	2

Example Projects

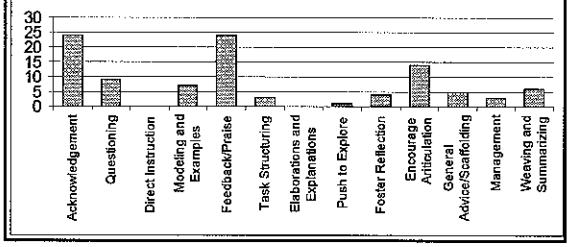


Critical Friend Post Example

"Beverly: Before I forget, I want to thank you again for your invaluable help at the ICE conference. I get used to using a particular piece of equipment or program, and it's hard for me to adapt quickly. You saved the day. One thing I have learned from using technology is that we need to depend upon each other for support. We are all in this boat together."

Forms of Learning Assistance

Figure 1. Forms of Learning Assistance in TICKIT Activities

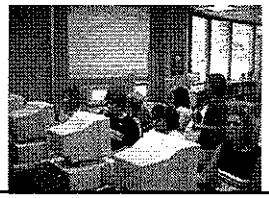


Findings: Summary

- Feedback, praise, social interaction most frequent
- Critical friends provide peer support, help, social
- Reading reactions & debates more content focus
- Critical friend postings perceived more beneficial
- Reading reactions & debates "just another task"
- Justification: 77% claims unsupported; 20% referenced classroom & other experience
- Depth: ~80% surface level
- Off Task: 7% total; most in critical friend activity

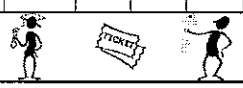
Research Question: Study #2

Do teachers who have been through the TICKIT program differ from teachers who have not on dimensions of computer integration?



TICKIT Results

Factors	Means: TICKIT Completers***	Means: TICKIT Applicants***	t	Sig.	* Effect Size
1. Technology Integration	74.05	38.25	7.663	.000***	1.81
2. Technology Limitations	11.60††	15.79	-3.281	.002**	.63
3. Technology Resistance	4.37††	7.91	-3.143	.003**	.80
4. Computer Proficiency	25.51	18.84	4.614	.000***	1.20
5. Learner-centered Instruction	18.29	12.40	5.120	.000***	1.22

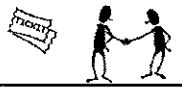


Relative Impact

Source of Influence	1st choice	2nd choice	3rd choice	% Ranking this 1,2 or 3
Peer Teacher Support	3	5	4	15%
Grant Money	0	2	2	5%
Administrative support	4	3	4	14%
Undergraduate Training	0	1	3	5%
Stipends	1	1	0	3%
Curriculum technology integration expectations	3	5	5	18%
Graduate courses outside TICKIT	2	4	4	13%
Personal ambition and interest in technology	**34**	**16**	**12**	**78%**
Parental and community expectations	1	2	3	5%
TICKIT professional development	**15**	**23**	**16**	**68%**
In-school professional development other than TICKIT	4	6	15	32%
Conferences, institutes, and other external	5	9	8	28%
Other	5	2	1	10%

TICKIT Teacher Voices

- "This class was very helpful. I gained a lot of confidence as a technology user from this class."
- "The door is now open. I will continue to try to find technological ways to teach them."
- "This was the best program I have ever been involved with as a teacher."



Story #8 (2004-2006): Data at your fingertips...

Research on the Online MBA Program, Kelley Direct (KD), at Indiana Univ

- 12 students in 1999 to 1,000 in 2004
- fully online; 1 week summer residencies
- Use regular on-ground instructors
- Data Collected: Surveys, focus groups, content analysis, interviews, document review, etc.

Kelley Direct Online Programs
Indiana University Kelley School of Business

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.)

Online MBA Program Team

1. Dr. Rich Madjuka, IU, KD Bus School
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13. me

Exploring Four Dimensions of Online Instructor Roles: A Program Level Case Study (Liu, Bonk, Magjuka, Lee, & Su, 2005)

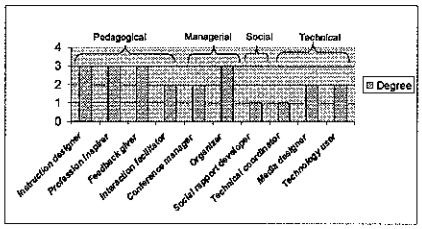


Figure 1. Instructors' preferences for different roles based on interview findings (High priority=3, Medium=2, Low priority=1)

Problems within Roles

- Lack program wide faculty interaction (P)
- Lack facilitation skills (P)
- Concerns about time commitment (P/S)
- Lack skills in weaving discussion (M)
- Lack awareness of social role (S)
- Lack better technology for social role (S)
- Lack technical skills (T)
- Concern about accessibility issues (T)

Bude, S., Bonk, C. J., Magjuka, R., Liu, X., Lee, S. H. (2005). The importance of interaction in web-based education: A program-level case study of online MBA courses. *Journal of Interactive Online Learning.*

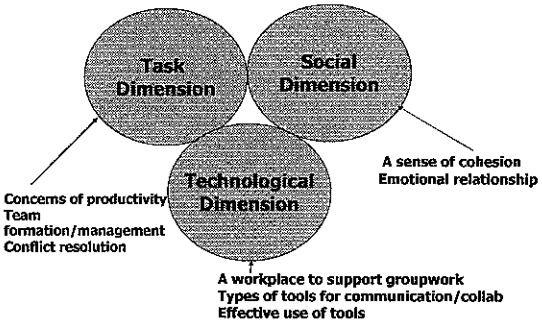
Table 2. Summary of Technology Tools and Other Course Resource Used in Online MBA Program.

Technologies	Course using	Course not using	Percentage of usage
Text books	27	0	100%
Email	26	1	96%
Text-based two way communications/discussions -Asynchronous text-basted (e.g., discussion forums) -Synchronous text-based (e.g., chat)	25 23 11	2 4 16	93% 85% 41%
Interactive quiz tools	18	9	67%
PowerPoint slides	15	12	56%
Web-pages	13	14	48%
Audio and video clips	12	15	44%
Telephone	8	18	30%
Voice- and visual-based two way communications (voice mail, instant messaging, video conf. etc.)	0	27	0%

Bude, S., Bonk, C. J., Magjuka, R., Liu, X., Lee, S. H. (2005). The importance of interaction in web-based education: A program-level case study of online MBA courses. *Journal of Interactive Online Learning.*

Instructional Activities	Course used	Course not used	Percentage of usage
Asking/responding to instructor questions	27	0	100%
Feedback on assignments	27	0	100%
Summary of class key points/concepts	26	1	96%
Instructor participation in class discussions	25	2	93%
Team-based learning activities	22	5	81%
Participation in online discussions as part of assessment	18	9	67%
Small team discussions	11	16	41%
Instructor participation in team discussions	1	26	4%
Virtual office hours	3	24	11%
Inter-team feedback/critique	4	23	15%
Peer evaluation	5	22	19%
Student online coffee house	2	25	7%
Student introduction forum	2	25	7%
Bulletin board to express student expectations	4	23	15%
Newsline	2	25	7%

Dimensions of virtual teaming



From Carabajal, LaPointe, and Gunawardena (2003)

Strategies Used for Virtual Teaming (Lee, Bonk, Magjuka, Su, & Liu, in press)

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

Concerns with Community Building (Blended!)

"As for community, I think we're staggering toward one that's driven by the faculty members themselves. The times that we've been in the same room we say to each other, "We've got to get together. We've got to form some kind of group so we can trade ideas." We did get together for a lunch but it was like very unplanned and we can do a lot more with that."

Strength of the Program

- *Flexibility:* 60%; Per 1 student "Flexibility, if it wasn't online I wouldn't be getting an MBA."
- *Excellent faculty*: 34%; Students perceive professors as knowledgeable, various teaching methods, good at providing immediate feedback.
- *High quality curriculum and course content*: 30% felt the program offers a high quality curriculum and course content; case-based instructional method valuable.
- *Reputation (13%); Admin support*: 11%; *Quality students*: 7%; *Diversity of community*: 6%
- Other strengths including its week long in-residence program, relatively low cost, overall program quality, and the possibility to use what is learned directly in the work setting

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.

Dropping out???

- Only 9% thought about dropping out due to disappointment with course design.
- Also a problem with a lack of community, lack of social presence of instructor, lack of bonding
  - The intention of dropping out of the classes
  - negatively correlated with the learner engagement (r=-.40),
  - feeling of being a part of a learning community (r=-.47),
  - comfort level of reading messages and materials online (r=-.40),
  - and helpfulness of instructor facilitation (r=-.51).

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.

Recommendations for Improvement

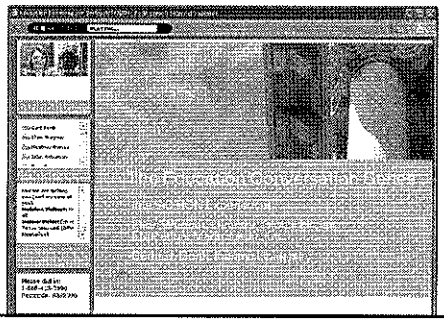
- More technology integration: 52%. Video & tele-conferencing, better chat.
- Immediate and detailed feedback
- More human interactions: Over 50%.
- More options, flexibility, elective courses.
- Enhance administrative support: Consulting services, contact options, hot line help.
- Flexibility on Team assignment: Choose teammates.
- Specific recs: More lectures, burned CDs, slide narrations, key take aways, emailing course announcement, and more instructor check up.

Story #9 (2006--2007): A synchronous life is a Breeze.

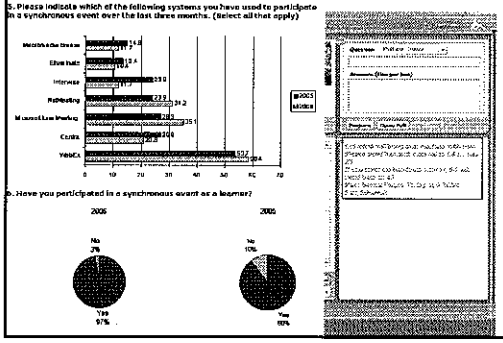
Research on use of Breeze synchronous training tool in online teaching in Instructional Systems Technology at IU.
- **Transcripts**
- **Interviews**

The movement toward synchronous instruction

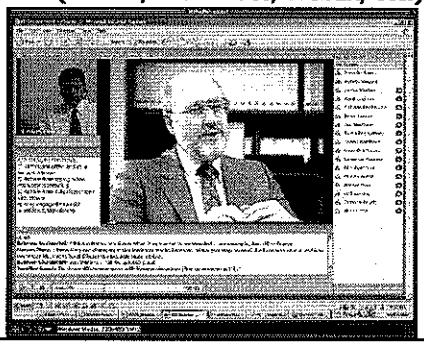
Making learning interactive is a Breeze!



Synchronous Conferencing



Synchronous Sessions (Breeze, Elluminate, WebEx, etc.)



Research Questions

- **What sync strategies employ in critique activity?**
- **What instructional benefits of sync?**
- **What issues and challenges encounter?**
- **How is Breeze as a sync collaboration tool?**
- **What suggestions and practical guidelines?**

Spring 2006: Merge distance and residential

- 22 distance students
- 11 residential students
- One full-time faculty member
- Five graduate teaching assistants
- 49 synchronous critique sessions

Table 1: Numbers of Synchronous Critique Sessions and Tools Used

Number of synchronous Critique sessions held	Tools used for synchronous critique sessions
49 (including 3 practice sessions)	Breeze[1] & telephone (38)[2] Breeze & Breeze voice chat (4) Breeze & Breeze text chat (5) Breeze & Breeze voice chat & telephone (2)

[1] Breeze used as a visual display for uploading student's projects and help to share the same screen during the presentation.
[2] Numbers in parentheses denote the number of critique sessions via the various communication tools.

Purpose of Critique Sessions

- (1) to help students apply the newly learned design principles in order to evaluate media design products,
- (2) to exchange constructive feedback on each other's project in progress.

Figure 1. Synchronous Critique in Breeze Context

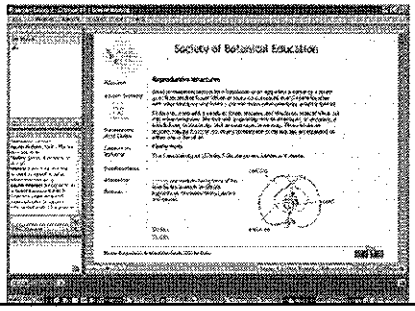


Table 3: Benefits of Peer Critique

- Providing immediate feedback
- Encouraging to exchange multiple perspectives
- Increasing interactions among participants
- Enhancing dynamic interactions
- Promoting passive students to become active
- Strengthening social presence allowing to exchange of emotional supports and supplying verbal elements

Table 4: Instructional Strategies Employed

- Prepare students:
  - Provide ground rules and guidelines
  - Hold practice sessions
  - Provide materials to be critiqued
- Promote interactions:
  - Structure the synchronous critique activity
  - Scaffold the discussion
  - Moderate students' critique behaviors
  - Use a small-group and be flexible about synchronous activity management

Table 5: Issues Identified on Synchronous Tools and Scheduling

	Advantages	Disadvantages
Breeze collaboration tool	Screen-share function during presentation Features to organize participants' roles and screen control Compatibility with the existing course Easiness of use Recording and archiving function	Small viewer. Delay or difficulty in playing large-sized files.
Breeze voice chat	No additional cost needed Easiness of use	Vulnerability to user's technical conditions
Telephone conference	Stable condition Easiness of use	Relatively high cost
Breeze text-based chat	No additional cost required	Difficulty in moderating discussions with a large group of students
Scheduling		Additional workload for instructors to arrange the meeting. Fixed- time meeting causing inconvenience for some distance students.

Story #10 (2006-2007): Where is a Wikibookian when you need one?

Survey of more than 80 Wikibookians about the creation and coordination of a Wikibook. Issues addressed include owership, problems encountered, tools to facilitate online collaboration.

The Challenges and Successes of Wikibookian Experts and Want-To-Bees

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Curt Bonk, Indiana University
Mimi Lee, University of Houston
Grace Lin, University of Houston

Paper presented at the E-Learn Conference, Honolulu, Hawaii
October 2006

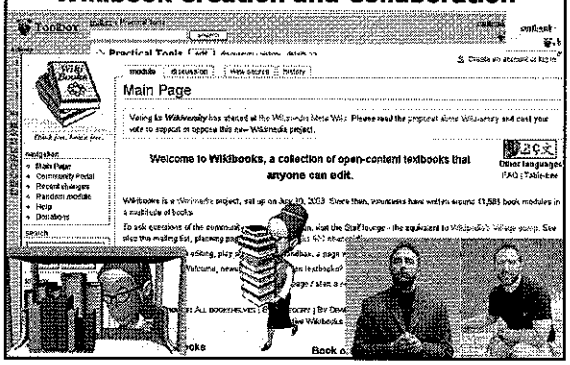
Basic Study

Survey of more than 80 Wikibookians about the creation and coordination of a Wikibook. Issues addressed include owership, problems encountered, tools to facilitate online collaboration.

Wikibookian

A Wikibookian is someone who coordinates a Wikibook project.

Wikibook Creation and Collaboration

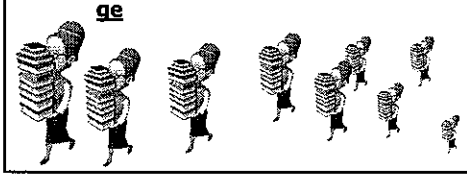


Objective and Design

Two-part study:

I. **Wikibook project among 3 classrooms in 3 locations**

II. **Wikibooks web site - http://en.wikibooks.org/wiki/Main_Page**

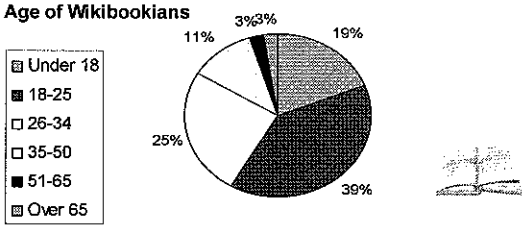


Methodology

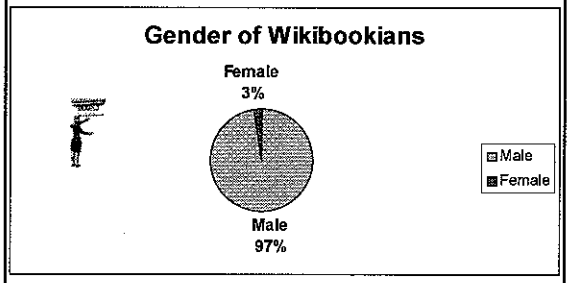
- **Two Surveys for each group**
  - **13 participants of cross-institutional Wikibook project**
  - **80 participants of Wikibookians**
- **Follow-up questions were sent via email to:**
  - **Three people of the Wikibook project**
  - **Eight people of the Wikibookian group**

Findings from Surveys (cont.)

- **Demographical data: 58% of Wikibookians were younger than 25 years old.**

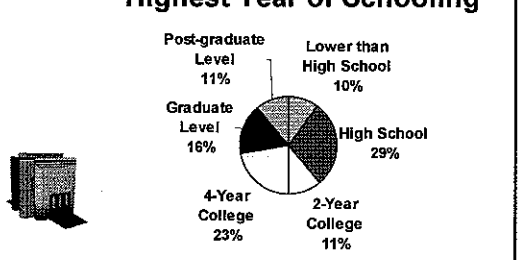


Demographical data: more than 97% were male



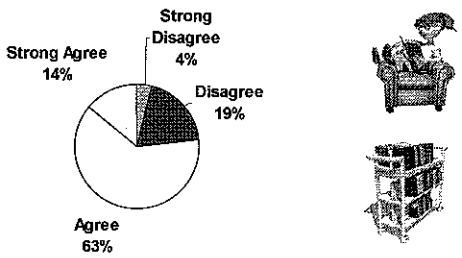
Findings from Surveys (cont.)

- **Demographical data: many without a college education**



Findings from Surveys (cont.)

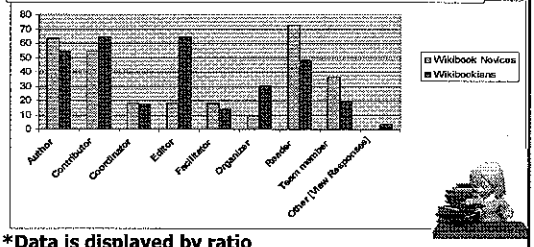
- **77% of Wikibookians agree that their recent Wikibook project was successful.**



Findings from Surveys (cont.)

- **Sense of community***

What were your primary roles in developing a Wikibook?

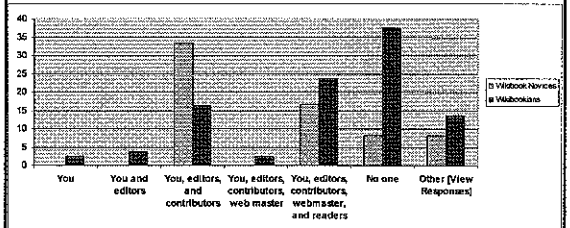


*Data is displayed by ratio

Findings from Surveys (cont.)

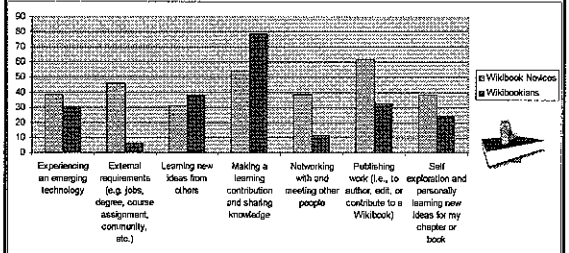
- **Control and ownership**

Who are the owners of a Wikibook?



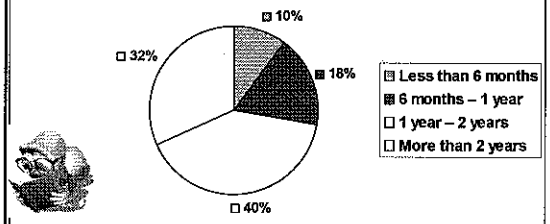
Findings from Surveys (cont.)

- **Inspiration to work on Wikibooks**



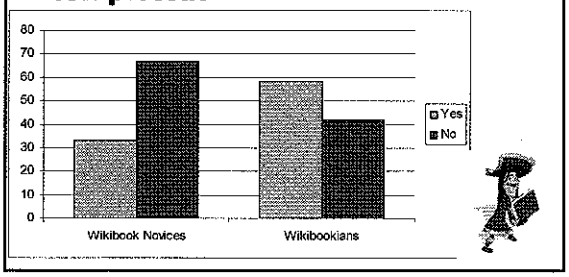
Findings from Surveys (cont.)

How long been involved in designing or contributing to a Wiki of any kind?

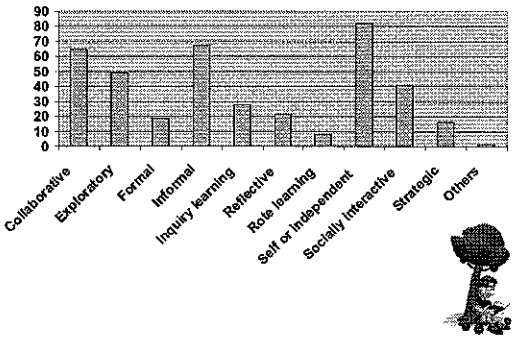


Findings from Surveys (cont.)

- **Question: Can a Wikibook ever be completed?**



What type of learning does a Wikibook foster?



Qualitative Themes from Email Interviews

1. How did you know about Wikibooks? Who, if anyone, initially showed you them or recommended Wikibooks and what did they say? (Wikibookian)

- ***I discovered WIKIBOOKS through WIKIPEDIA- some Wikipedia articles refer to articles on WikiBooks, saying "WikiBooks has more on the subject" and include a link.***

2. What was (were) your expectation(s) before using Wiki? (Wikibookian)

- ***My expectation was to help create a free, collaboratively written textbook. At this point I have done almost all of the work on the book. Admittedly, word about the book hasn't gotten out, but hopefully once it does others will begin to contribute. Until that happens, my expectations will not, technically, have been met.***

5. Are there situations in a Wikibook environment that are unique or different from other collaborative environments you have encountered? If so, what are they?

- ***The difference is that I'm usually working with people I've never met, and with the sort of people I wouldn't ordinarily work with in writing. It's much more challenging to see where someone is coming from if you haven't had a chance to meet her or talk with her..... Sometimes, the new perspective is very interesting. At other times, the other person can be way off base.***

6. Explain whether a Wikibook is ever complete? Why or why not?

- **No wiki is ever complete, because it is ever evolving. That's one of the best things about wiki's. I personally think that paper is dead and in many ways the ideas contained within them too. I want my ideas and thought evolved and allowing others to improve them makes the work alive.**

7. What would happen if someone edited or changed a section of your Wikibook but you did not agree with the change? Has this ever happened to you? If so, what did you do?

- **Sure it has happened and usually I challenge the changes and or clarify my points and will revert the changes after I have posted a discussion section and got others opinions.**

8. What are the advantages and disadvantages of Wikibooks mechanisms?

- Advantages: Openness, accountability, record of changes and attributions, easiness of use, free license, formatting buttons, levels of permissions, automated features like the Infobox, formatting shortcuts, templates, and navigation, ...

9. Which activities or tools would you suggest to include in Wikibooks environment in order to promote learning collaboration?

- Make a special area where one set group of people can take over a book for a time, for example, to enable one class or one group of professors develop materials in a protected environment where, at least for a time, they have the final authority of whatever happens in that area.

10. Are there any concerns, suggestions, and/or recommendations to someone creating a Wikibook or for someone wanting to become a Wikibook author or editor?

- *Get help. Don't try to do it on your own, it's a too big amount of work and you will definitely loose the overview.*

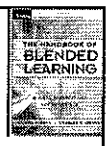
11. What do you see in the future in terms of Wikibooks?

- *I don't know. It might go two ways:*
  **Become a success, people will use it.*
  **Die a silent death, people won't use. it.*
  There is no "some people will use it". Because when you want your book to become used, it has to be used by a large amount of people, not by a few.

12. Do you have any other comments about Wikibooks or the Wikibook process?

- *Go rockin' on!*

Two + 1 (3) Key Research Questions for the Next 2 years?



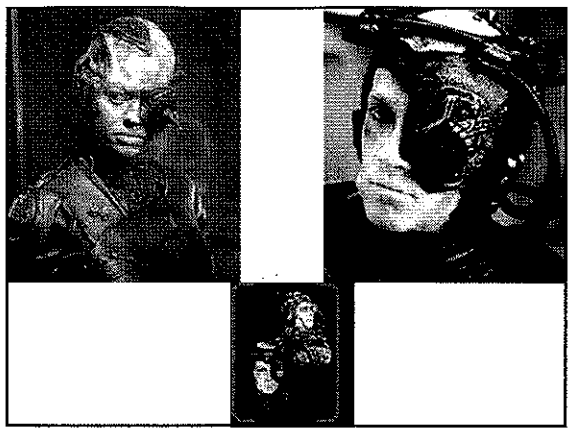
1. What new sorts of collaborations will knowledge repositories spur? What impact will these have on innovative pedagogy?

2. How will wikis, blogs, podcasts and other technology innovations foster more individualized learning and opportunities for social constructivist teaching practices?

3. What new forms of education will emerge from handheld devices and mobile computing?

What can we say about research on technology then???

- **It is everywhere!!!!!!!!**
- **Resistance is futile!!!!!!!**



Poll: Do you think you will do research on classroom technology integration?

a. Yes, definitely
b. Probably yes
c. Maybe
d. No
e. Do not yet know

Ten Final Tips

1. Always plan ahead
2. A published journal article is more important sometimes than the actual activity
3. Consider writing grant proposals to foundations that reward teaching related grants
4. Collect extra data and archive all data (graduate students might analyze in 2-3 years)
5. Take a leadership role in a technology type of conference

Ten Final Tips

6. Talk to others about how you overcame your hesitancy
7. Note technology integration efforts on your resume/CV (it is who you are)
8. Scan the Web for tech integration ideas and examples
9. Explain what you are doing to your students (be clear and honest)
10. Recruit help: post-docs, pre-docs, graduate students, undergrads, practitioners in the field, colleagues, etc.

It's Over...

Final Poll. Ok, then, who wants more???

A.Yes

B. No

C. Not sure

Sorry...it really is the end!!!

The End...Remember