A Case Study for Evaluating a New Technology

Selecting a Synchronous Collaboration Tool at the University of Tennessee

Shane Colter, Program Coordinator, colters@utk.edu
Gina Phipps, Instructional Design Specialist, gphipp1@utk.edu
Innovative Technologies Center – http://itc.utk.edu

Overview

- Definition
- Overview of problem/issue
- History of evaluation
- Important considerations in making final recommendation
- Recent/current evaluation projects
- Next steps
- Parameters to be defined
- Lessons learned
- Product Overviews

Online Synchronous Collaboration Tools

Synchronous collaboration ("SynCollab") tools enable faculty and students to meet in a virtual classroom environment, thereby enabling participation regardless of physical location.

Virtual classrooms usually provide the following capabilities: two-way audio, text chat, one- or two-way video, presentation capabilities via PowerPoint, Web browser sharing, document sharing (Word, PDF, images, video, audio, etc...), application sharing, white board, polling/testing, and archiving options.

Online Synchronous Collaboration Tools

While synchronous collaboration may typically be considered a desirable component of fully online courses, there are numerous uses of such tools within face-to-face courses as well. Student groups can collaborate outside of class and with students at other institutions. Guest speakers can participate remotely and faculty can conduct classes from a remote location such as a conference. Because sessions can be recorded and archived, students can review them at any time.
Online Synchronous Collaboration Tools

Synchronous collaboration tools can also be used for non-course-related activities such as fostering community among distributed UT members (e.g., students participating in Study Abroad or remote internships); promoting international/intercultural communication in preparation for trips (e.g., Summer China Scholars/Teachers); facilitating faculty/student research at a distance; and holding meetings, office hours, and tutoring or mentoring sessions.

Overview of Problem/Issue

- Initial Charge
  - Research, evaluate and test existing online synchronous learning tools
  - Identify one or more tools for further evaluation by students and faculty
- Context
  - Distance Education already utilizing Centra Symposium
  - Request initiated by Faculty Senate IT committee
  - Seeking to augment F2F with synchronous online instruction
  - All on-campus classrooms have wireless access
  - Tight integration with campus enterprise-level CMS (Bb) desirable
  - Minimal interest demonstrated by faculty

History of SynCollab Evaluation

Fall '04
- Initial ITC staff review of 34 products
- Spr '05
  - ITC test of 8 products via demo accounts
- Sum '05
  - Limited faculty evaluation of 4 products
- Fall '05
  - Recommended faculty further test 2 products; on hold
- Spr/Sum '06
  - Testing via faculty focus group, ad hoc use, blended course
### History of SynCollab Evaluation  
#### Fall '04, cont.

#### Applications Reviewed

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<td>“School”</td>
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<td>Oceana</td>
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<td>CAF</td>
<td>“Virtual Room”</td>
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<td>ElseWhere</td>
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<td>CyberTools</td>
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<td>Elluminate</td>
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<td>Macromedia</td>
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<td>WebDemo</td>
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#### Spring/Summer '05

- **Four tools recommended for preliminary faculty review:**
  - Centra Symposium
  - Elluminate Live
  - Horizon Live Wimba
  - Macromedia Breeze

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#### History of SynCollab Evaluation  
#### Fall '04, cont.

- Initial review somewhat subjective, dependent on vendor documentation
- Minimum threshold of usability led to demo account request (8 products)
- Presence and functionality of desired performance characteristics evaluated
- Application usability and interface simplicity were key considerations

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#### Spring/Summer '05, cont.

- **Set of criteria**
  - Class Tools (11 criteria)
  - Technical Requirements (7 criteria)
  - Management Tools (7 criteria)
  - Plus, in-house review of Usability (5 criteria) and Miscellaneous (e.g., cost)

*“Choosing a Synchronous Learning Solution” & “Guide to Synchronous WBT Features” by Jennifer Hofmann, NCSU (now with InSyncTraining) was a particularly useful resource.*
History of SynCollab Evaluation
Spring/Summer '05, cont.

Class Tools
- Audio (2-way)
- Chat (Private?)
- Discussion boards
- Shared whiteboards
- Content download
- Synchronized web browser (Instr./Student)
- Application sharing (Instr./Student)
- Note-taking (Instr./Student)
- Feedback/polling
- Testing
- Video (2-way)

History of SynCollab Evaluation
Spring/Summer '05, cont.

Technical Requirements/Compatibility Criteria
- Hardware requirements (server-based?)
- Local hosting/ASP?
- Software requirements (plug-ins, client-side)
- Multiple user platforms
- Multiple browsers
- Internet connectivity (dial-up, DSL, wireless)
- Security compatibility (firewall, VPN, LDAP)
- Number of concurrent users
- Technical support

History of SynCollab Evaluation
Spring/Summer '05, cont.

Management Tools Criteria
- Archive session
- Break-out groups
- Off-line student access to content
- Student access tracking
- Rehearsal function / lecture queue
- Multiple presenter (Instr./Student)
- Co-Instructor access

History of SynCollab Evaluation
Spring/Summer '05, cont.

Usability Criteria
- Interface design
- Individual content windows
- Accessibility
- Instructor and student user guides
- Integration with existing CMS tools
Participant Survey Questions

- Indicate type of Internet connection, operating system, browser.
- Rate series of tool features (or Not Observed).
- Describe any specific difficulties encountered.
- Indicate general impressions, potential uses for instruction.

Sample Results – Text Chat

Recommendation from final report:

"Before embarking on a more extensive test, it may be useful to answer the following questions:

1. Among instructors expected to use synchronous collaboration tools, which features are perceived as ‘essential’, which are likely ‘useful’, and which are just ‘desirable’?
2. For which, if any, of these features are open-source or low-cost applications acceptable as standalone alternatives?
3. What is the anticipated number of instructor and student licenses required for a one-year pilot test?
4. What are the funding and support requirements?"
**History of SynCollab Evaluation**

*Fall '05, cont.*

- Hurry up and wait…
- Then the stars aligned:
  - UT SACS reaccreditation
  - QEP: international & intercultural awareness
  - Reconsideration of campus Facilities Fee
  - Emphasis on Virtual Classroom suite

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**Important Considerations**

when conducting final evaluation

- Features (incl. faculty feedback!)
- Blackboard integration
- Training and support
- Cost and configuration
- Accessibility
- Multiple language support
- Peer institutions
- Future plans of vendors

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**Current SynCollab Evaluation Projects**

*Spring/Summer '06*

- Extensive evaluation of Elluminate Live! and Horizon Wimba Live Classroom for the purpose of recommending a tool for purchase in fall '06
  - Faculty Focus Group
  - Ad Hoc Use
  - Blended Course
  - Miscellaneous

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**Current SynCollab Evaluation Projects**

*Spring/Summer '06, cont.*

- Faculty Focus Group
  - Conducted a more focused evaluation of two tools
    - 10 faculty participants who expressed an interest in using synchronous collaboration tools in teaching and research
    - 2½ - 3 hours of training (per tool) - live, vendor-led and ITC staff-led sessions, movies, cheat sheets
    - Participants exposed to moderator and student tools
  - Data gathering
    - Participants filled out surveys
    - We discussed participant experience with them unofficially via email and face-to-face meetings
Faculty Focus Group, cont.

- What we learned
  - Features ranked as “very important” to participants
    - 100% - Presentation: slides
    - 89% - Text chat, presence indicators, archiving
    - 78% - Two-way audio, quick polling, whiteboard
  - Specific feature advantages
    - EL – quick poll interface, advanced quizzing, breakout rooms
    - HWLC – simultaneous talk, more intuitive whiteboard features
  - Anticipated use of tool
    - 44% - teaching once per week, research once per month
    - 44% - teaching one per month, research once per semester

Anticipated uses

- 50% - teaching while away from campus, collaboration for research
- 38% - remote guest lectures, student collaboration with other universities
- 25% - other meetings (e.g., associations, committees)

Overall

- Participants ranked EL slightly higher, but when asked which tool they would recommend for adoption by UT, they voted in favor of HWLC by 1 vote

Ad Hoc Uses

- Making tools available for presentations, meetings
  - outside of Bb
  - not publicized, word of mouth (by ITC)
  - very little training for moderators
- Data gathering
  - users fill out surveys
  - we view session recordings
- What we’ve learned so far (only Elluminate Live!)
  - computer configuration is easy, product works well technically
  - tool is relatively easy to use, remote coaching/training works well
  - many potential administrative uses of such a tool statewide
  - warning: momentum builds quickly!!!

Blended Course

- Supporting an online course with face-to-face, asynchronous and synchronous meetings
  - graduate course on Action Research
  - 9 students, collaborative learning approach
  - synchronous meetings every 2 weeks – 4 meetings total, two w/Elluminate and two w/ Horizon Wimba
  - offered overview of project and synchronous collaboration tools at first face-to-face meeting
  - require all students to participate in practice sessions prior to first synchronous meeting
Current SynCollab Evaluation Projects
Spring/Summer ’06, cont.

Blended Course, cont.
- Data gathering
  - participants debrief at end of each session and fill out a survey
  - we observe live sessions and/or archived sessions
  - participants will include technology reflections in a final course paper
  - participants will fill out a final survey and will be asked to indicate a tool preference

What we’ve learned so far (only Elluminate Live!)
- practice sessions make a big difference
- participants are nervous about meeting in this new environment, but gain confidence quickly when they have initial success
- possible for instructor to facilitate conversation and manage technology in a very interactive course
- participants would like to have more control over the interface, i.e. make direct messaging window bigger, use whiteboard and application sharing at same time

Miscellaneous Evaluation Activities
- Pay attention to and make note of:
  - exchanges with vendors
  - sales, marketing
  - technical support
  - training
  - how well tools work within and outside of CMS

Next steps
- Plan for next two months
  - Continue to support/monitor hybrid course, ad hoc sessions
  - Converse with vendors regarding
    - pricing/licensing
    - support/training
    - hosting options
  - Write final report with recommendations on
    - product to purchase
    - license type
    - roll-out timeline/procedures
    - support and training
Parameters to be Defined

- Access? if not unrestricted, then how to control
- Purpose? education, research, administration
- Deployment? program vs. faculty based
- Cost model? who pays (tied to who uses)

Lessons Learned

- Allocate effort in proportion to impact (e.g., time/money)
- Obtain clear directive regarding charge
- Identify key decision makers
- Learn from others’ experience
- Advocate for yourselves as experts
- Know your customers/audience & their needs
- Identify & collaborate with campus allies
- Consider business process (e.g., RFP, timeline)
- Don’t neglect “soft” factors (e.g., how treated by vendor)

Product Overviews

- [Illuminate](https://www.elluminate.com/site/pmtg.jnlp?psid=d5738281.240300)
- [Horizon Wimba](http://www.horizonwimba.com/tools/4_0_interface.html)