Understanding the Feedback Loop: From Audits to Assessments in Shaping and Reshaping Technology-rich Learning Spaces

PKAL LSC Webinar
October 20, 2010
Joan K. Lippincott
Coalition for Networked Information
A Question for You:

- When you complete your building or renovation project, will you have accomplished what you set out to do?
- How do you know what is needed?
- How can you assess what you have accomplished?

New campus - American U. of Cairo
Have you improved lighting, HVAC, technology, ambience?

The Link at Duke U.
Have you improved learning?

Group study room at Marriott Library, U. Utah
The Feedback Loop

- Plan assessment from the beginning of your project
  - *Include audits and/or needs assessment as part of the assessment plan*
- Align assessment with project goals
- Operationalize your goals
- Collect the baseline data you may need
The Feedback Loop

- Institute changes in support of goals
- Implement the building project
- Assess your success in meeting goals
- Implement needed changes
Focus on assessment of goals linked to institution’s learning priorities

- Undergraduate research
- Student engagement
- Critical thinking skills
- New literacies
- Learning communities
- Community involvement
- Retention
  - Support for under-prepared students
  - Development of sense of community
Assessment is Resource-Intensive

- Put resources into assessment that will matter
  - *Identify the purpose and audience(s) for assessment activities*
  - *Consider the types of information (data) and reports that might have the most meaning and impact*
  - *Work with assessment experts*
Collect Baseline Data - Audit

- **Audit of spaces**
  - **What is current size, configuration & utilization of teaching and learning spaces**
  - **What types of spaces do faculty and students need for teaching and learning**
  - **Can we develop classroom design guidelines for buildings or departments**

Ellenzweig Assoc. “The Vassar Story”  
http://www.pkal.org/documents/TheVassarStory.cfm
Collect Baseline Data - Needs Assessment

- Understand community needs
  - Faculty, staff, students, neighbors
  - Encourage genuine engagement with community to understand needs
  - Look at behavior, not just numbers

http://www.arl.org/rtl/space/index.shtml
Institute changes that will inform your ability to enable faculty and students to get the most out of new spaces

- An assessment program at NCSU
- Goal: Improve student learning
- Investigate technology-based innovation
- Develop appropriate policies
- Improve the physical learning environment

http://litre.ncsu.edu/
Assist faculty in understanding the role of technology and the role of your space: Workshop at UPenn Weigle Info Commons

Engaging Students Through Technology 2010

Third Annual Symposium
Friday, October 15, 2010, 10:30 am to 3 pm

We live today in a state of 'continuous partial attention'. Instant access to people and information can both engage and distract us. New tools break down classroom boundaries and change the nature of college education. This year's symposium explores the creative ways faculty are integrating technologies into teaching, the challenges they face, and the disruptive nature of mobile technologies in lecture contexts. The day's program will include faculty presentations, hands-on exploration and small-group discussions. The symposium was open to Penn faculty and instructors. Videos, presentation materials and photos will be posted shortly.

10:30 am to Noon
Faculty Panel
Cohen Hall
Rm 402

Noon to 1 pm
Informal lunch with presenters
WIC Data Diner
Van Pelt Dietrich Library Center

1 to 2 pm
Student Panel and Tech Explorations
Concurrent sessions
Van Pelt Dietrich Library Center

2 to 3 pm
Disc. Group and Tech Explorations
Concurrent sessions
Van Pelt Dietrich Library Center

Faculty Panel - 10:30 am to Noon

Six ten-minute presentations on how and why a particular technology works with each person’s teaching goals:

Regina Austin
Student Created Videos
Andrew Lamas
Visual Expression
Carol Muller
Interactive Music Histories
Kris Rabberman
Online Collaboration
Ralph Rosen
Facebook
Mark Yim
Disruptive Technologies

http://wic.library.upenn.edu/wicshops/pennedutech2010.html
How Do You Create a Measurable Goal for Your Project?

- Critically examine the goals you have developed for your project
- Articulate a use case that would demonstrate what you are trying to accomplish in your project
- Restate the goal incorporating outcomes
Refining Goals

- **Stated goal:** Develop spaces for interactive, collaborative learning.
- **Restated goal:** Develop technology-rich spaces for collaborative learning to provide an environment that encourages the social aspects of learning and enhances engagement in the learning process.
Assessing the Implementation

- Study of Intro Astronomy classes
  - Nationwide: 4000 students; 31 instructors
- How does instructional style in Intro Astronomy affect student learning?
- Single most important variable in explaining gain in learning was *interactivity*
  - *Clickers: think/pair/share*
  - *Group work*

Implications for space: availability of clickers; capability of forming small groups for part of class time
Are You Accomplishing Your Goals?
Some Questions to Consider

Stata Center - MIT
Does an active learning classroom help retain majors in Biology?

http://dmc.umn.edu/spotlight/active-classrooms.shtml
Are students able to effectively collaborate on projects in the space?

Learning Commons - Georgia Tech
Are you accomplishing your goal?

- Are marketing or education or communications students doing better presentations now?
- Aligning spaces and services

UPenn Weigle Info Commons
Are you accomplishing your goal?

- Are International Relations and/or foreign language students able to do more in depth, current, engaging work here?
Are you accomplishing your goal?

- Do commuter students feel a stronger sense of belonging because of the availability of these spaces?
- Café - U. Colorado, Boulder Info Commons
- Gaming station - NC State Learning Commons
Does artwork by a famous alum enhance student pride in the institution?

Dale Chihuly Glass Sculpture - Classroom Building
U. Puget Sound
How to assess learning spaces

- Data collection
- Analysis of student work
- User surveys
- Observation/Photos
- Focus groups
- Case studies
- Interviews
Assessment - An Ongoing Process

- Faculty and student needs change
- Turnover in faculty could result in vastly different pedagogical styles
- Technology changes
- Ongoing refinements should be based on data
Use available outside resources

- Project Kaleidoscope (PKAL)
- www.pkal.org
- EDUCAUSE Learning Space Design Website: http://www.educause.edu/LearningSpace/5521
- ARL LibQUAL+™ program
- www.libqual.org
- TLT Flashlight Project http://www.tltgroup.org
- Lippincott, Joan K. “Learning Spaces: Involving Faculty to Improve Pedagogy.” EDUCAUSE Review
- Vol. 44, 2009 http://www.educause.edu
Thank you!

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- http://www.cni.org/staff/joan_index.html

The Link - Duke University