Assessment of Learning Spaces

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Why Assess?

- Need for data to guide facilities development
- Measuring the impact of pedagogy, programs, and college/university life on students
- Address changing needs of today’s students
- Provide for new learning and pedagogical approaches to serve world community
Understanding the Student Experience

- How students come to our institutions
- How they prefer to learn and what motivates engagement
- How our institutions are supporting or are not supporting them in this process
Person-Environment Interaction Theories and Models

- Learning environments encourage or constrain behavior.
- Individuals create or define learning spaces as a result of collective socialization.
- Learning environments are influenced by organizational goals, complexity, centralization, formalization, stratification, production, and efficiency.
- Perceptions of a learning space are influenced by environmental press, social climate, and campus cultures.

Strange & Banning, 2001
Theory of Involvement

- Psychological and physical energy required
- Learning is directly proportional to the quality and quantity of involvement

Astin, 1985
Project Plan: Data-Based Decisions

- Develop the questions and goals to guide the project
- Gather data
- Evaluate data
- Use the results to guide decisions
Long-Term Goal

To create optimal environments that have a positive impact on the learning and development of students
Developing the Questions

How will we know if we are successful?

- Learning Outcomes
- Student Engagement

What variables can we work with to accomplish our goals?

- Learning Space
- Program Development
- Pedagogical Practices
Defining & Choosing the Variables

- What do we need to know to more completely define our variables?
- Are there sources of data that we can use?
- If we do not have measures, what is the best approach for the development of assessment measures?
Foundational Questions: Learning Outcomes & Engagement

- How do/should we assess? (tests, grades, rubrics, frequency counts)
- Will our assessment measure generalize? (across students, courses, programs, university-wide)
Foundational Questions: Target Variables

- Learning Space, Programs, and Pedagogy are pretty broad. How can we narrow the targets to be more manageable?

- Multiple methods and multiple sources provide both qualitative and quantitative information to identify salient issues and to specify sub-targets.
The Questions

- **Stage I**
  1. What are student preferences for learning?
  2. How does the environment/program/pedagogy impact student learning?

- **Stage II**
  1. Can we improve upon the learning environment/program/pedagogy to optimize student learning outcomes?
  2. How will we know if we have accomplished our goal?
Data Mining

- National Survey of Student Engagement or Community College Survey of Engagement
- College Student Experiences Questionnaire
- Course specific outcome data
- Alumni surveys
Photographic Studies
Assessment of Photographic Studies

- Characteristics of user (gender, race, multi-task, working alone, academic focused, etc.)
- Characteristics of the space (furniture, lighting, windows, etc.)
- Frequency count (time and extent of use)
Best Place Survey

- What is the best place on campus to study? Why?
- What is the worst place on campus to study? Why?
- What is the best place to socialize with your friends? Why?
- What is the worst place to socialize with your friends? Why?
Student Self Reported Preference Assessment

- Rate your preference for spending your time...
- Rate the types of activities you prefer...
- Rate your preference for learning through...
Student Focus Groups

- Impression of spaces
- Sense of connection between space and learning
- Perceived influence of space on faculty
Faculty Focus Groups

- Reaction to spaces
- Perceived influence of space on pedagogy
- Perceived influence of space on student learning and engagement
Informal Interviews

- What influences students, faculty, or other community members to use a specific space?
- Are these factors different for students than for faculty?
Observations

- How do space characteristics influence faculty pedagogy?
- How do space characteristics influence the quality of student engagement?
The University of Dayton Study
“Professors seem a lot more at our level, like the professors I meet with in other buildings, the set up of the room, they are like in the front of the room and like they have more of a position of superiority and here we’re in a circle and they’re a part of us and we’re a part of them. And also the fact that this is our living space, they are, like, coming in to our home and we have more possession of the space than they do… I get the feeling that they respect that and we meet on a more similar level.”

- Alex, in Marianist Hall
Pedagogy

- Adaptation to space
- Available technology
- Community of practice or instruction
Taxonomy of Significant Learning

- Foundational Knowledge
- Application
- Integration
- Human Dimension
- Caring
- Learning How to Learn

L. Dee Fink, 2003
Learning Spaces

There is an emotional reaction related to the environment that encourages or discourages engagement.
“It’s like there is a conference going on every day and you know that when you walk in. I think the students relate to that, they know there is already work in progress.”

– Susan, a faculty member in Marianist Hall
Key Space Issues

- Flexibility
- Comfort
- Distractions

5 Senses
## Program

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<th>Formal Learning</th>
<th>Informal Learning</th>
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<td><strong>Environment</strong></td>
<td>Physical &amp; Virtual</td>
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<td><strong>Time</strong></td>
<td>Scheduled &amp; Self-Selected &amp; Flexible</td>
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<td><strong>Structure</strong></td>
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Student Engagement: UD Students...

- Believe that they learn the most when they are highly engaged
- Are highly engaged in social activities and computer-based activities
- Prefer UD learning-living environments which integrate social, technological, and academic elements
Student Engagement: UD Students...

- Prefer academic experiences that involve communication or interaction with others
- Prefer to study and get school work completed in comfortable, convenient, quiet spaces that are free of distractions
- Report that they learn the most where they spend the most time, or where their program or course is located
Setting Factors and Engagement

Engagement is encouraged by:

- Learning spaces that are comfortable, big & open, flexible, and appeal to the emotions
- Learning spaces that support and integrate both facilitated program-based learning and self-directed learning
- Learning spaces & academic programs that facilitate group interaction, as well as, individual, independent, self directed learning
Setting Factors and Engagement

Engagement is discouraged by:

- Learning spaces that have uncomfortable conditions, are distracting, and fail to address the emotions
- Learning spaces that are limited to program-based learning
- Learning spaces & academic programs that are limited in structure and/or have content restrictions
- Learning spaces & academic programs that inhibit group interaction
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