

A CASE STUDY ON THE LEARNING SPACE DESIGN PROCESS

A Case Study on the Learning Space Design Process

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Doable research!
Definitely persuades reader this is a
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a little over the top

General Background

As teaching and learning practices evolve and continue to push new boundaries, physical learning spaces struggle to keep pace and meet the needs of the 21st century instructor and learner. Traditional classrooms filled to the brim with rows of fixed furniture, once serving as the premium option for instructor-centered, high enrollment classes, suddenly pose instructional barriers as the trends shift toward learner-centered, collaborative learning spaces. On the other hand, creating spaces that support these evolving trends in teaching and learning have their own challenges. Retrofitting existing buildings to meet modern structural and infrastructure requirements for classrooms can be costly, time intensive, and in some cases, physically impossible. The desire for classrooms to support the latest and greatest technologies can dramatically affect infrastructure requirements as well as up-front installation and long-term maintenance costs as new technologies and standards are developed at an ever-increasing pace. In addition, the focus of many technology developers is the consumer market, and the degree of success to which these tools are able to integrate into the enterprise market varies significantly.

These factors take into account the external barriers; however, the internal workings of each institution pose their own challenges. In addition to state and federal laws, institutions have their own policies, standards, and procedures to which they must conform. Institutional culture also plays a significant role in the drivers for and against change. Factors such as class scheduling, enrollment expectations, support services, and faculty preferences can have a direct impact on classroom renovation planning and

Need to write more precisely with less drama - you are not writing a novel :)

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You need some references to back up these assertions

a little over the top

What needs are these? More special than learners in 1999? (Be careful of cliches.)

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It would be good to cite 1 or 2 of these

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learning space design. As a result, renovation projects are highly complex, requiring careful coordination, communication, and feedback between multiple stakeholders to establish priorities within (or despite) the institutional confines and navigate around barriers to achieve the desired learning space design and teaching and learning outcomes.

Collier, Watson, & Ozuna, 2011
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Citation? I'm sure there is some architectural lit. that will support this

In 2010, the Center for Excellence in Teaching and Learning at Texas Wesleyan University took a different approach to learning space design. They conducted a competition asking faculty and students to work together in groups to design a classroom that "...promote[s] innovation in learning space design and to advance instructors' understanding of how learning space design impacts teaching and learning" (Collier, Watson, & Ozuna, 2011). Specifically, innovation in design and student-centered teaching practices was emphasized. Although the five submissions were designed differently in terms of physical layout, technology integration, educational theory foundations, and teaching and learning practices, the researchers noted commonalities between submissions included the need for flexibility in the design and "called attention to the unique characteristics of today's students and their need to personalize the learning environment" (Collier et al., 2011). In addition, all of the designs incorporated features commonly associated with active learning spaces to foster collaboration, hands-on activities, and ^{support} utilize the instructor as a facilitator. Interestingly, the focus of the study did not incorporate faculty or student perceptions regarding barriers. Instead, several efforts were made to remove barriers from the overall process. For example, a preselected room was provided to groups to focus their

Interesting

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design efforts, minimizing potential physical barriers. As a reward for having the selected design, the preselected room would be renovated to match the design with few, if any, budgetary restrictions. In addition, the faculty designer(s) received priority scheduling in the classroom following the renovation for two semesters. Although intended as a motivational technique to encourage participation in the competition, lifting the budgetary restrictions and providing priority scheduling resulted in a secondary benefit by removing some of the institutional, or internal, barriers associated with learning space design.

well-written

At many institutions, the criteria for designing learning spaces is not as clear cut as the Texas Wesleyan competition. While flexible design and personalized instruction may be the ideal, it is often unattainable or unsustainable. However, the research conducted on current learning space trends tend to focus solely on teaching practices and student learning outcomes, steering clear of common issues faced by institutions making learning space design decisions such as the impact on class enrollments, technology and infrastructure requirements, and faculty development programming. Despite the positive return on student learning outcomes as a result of personalized instruction demonstrated in active learning spaces (Whiteside, Brooks, & Walker, 2010), institutions often have differing or competing priorities that impact the actual return on investment in technology-heavy, learner-centered learning spaces. To better support learning space design recommendations for the 21st Century learner, it is necessary to first conduct research into the barriers stakeholders encounter, identify commonalities, and evaluate the alignment of systems for which change is achieved during the learning

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space design process.

Purpose of the Study

The purpose of this study is to identify stakeholders' perceived challenges for creating effective learning spaces and to identify strategies for overcoming these barriers. The study will include participants from a single university across multiple colleges, disciplines, and stakeholder groups. As a part of this study, the university's process for conducting renovations will be documented, both from a procedural standpoint and from the perspective of the stakeholders.

The reason for selecting a diverse group of participants is to develop an inventory of common challenges associated with learning space design shared across multiple disciplines, differentiating from discipline or college-specific challenges. It allows for the collection of a diverse sampling of workarounds for overcoming these barriers. By recording the institution's renovation procedures, the study provides an opportunity to compare and contrast stakeholder perceptions about the overall process. It also prepares a foundation for comparison to the renovation processes at other institutions in future research.

The data from this study can be used to identify priorities for learning space design. It can also be used to diagnose discrepancies and confines in the overall renovation process, allowing for suggestions to realign the system as a whole if necessary. Ideally, the data from this study could be used as a foundation for future research to validate or challenge findings as the scale expands and the diversity of the participant groups is adapted.

Good - very clear

Good - very clear

Well-written section

Well-written section

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Research questions

- Do stakeholders' perceptions about the process for learning space design match the documented institutional process?
- Around what frameworks do stakeholders orient and prioritize learning space design projects (e.g. instructional and theoretical foundations, institutional needs, physical design needs, etc.)?
- What barriers do stakeholders identify when undertaking learning space design projects and how do they seek to overcome them?

By identifying the discrepancies in the institutional process as well as the direct or indirect impact the process has on design priorities, it is possible to propose changes to streamline and/or improve the overall process for learning space design for the institution to help stakeholders meet attainable goals without stifling innovation. With future research, it may be possible to identify changes that can be scaled across institutions.

Significance of the Study

Teaching practices and student learning outcomes tend to be the primary focus of current research on learning spaces. Common challenges institutions face such as cost, access to technology, structural and infrastructure needs, laws and policies, and faculty support are frequently overlooked. The specific contexts under which current learning space research is conducted results in gaps indicating whether certain trends can scale to meet specific instructional and institutional needs. Examples include enrollment requirements, room scheduling, and ADA compliance. Long-term research

Need to define this.

Need to define this

Good!

Good

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evaluating the viability of current learning space trends for sustainability is needed.

Although it cannot address all of the potential barriers, this study is designed to serve as a starting point by providing additional context to the learning space design process by documenting stakeholders' perceived barriers and suggested methods by which they seek to overcome them. By seeking feedback from a diverse cross-section of faculty, staff, and students across multiple colleges and disciplines, this study can begin to document the physical and institutional barriers and techniques for overcoming challenges within one institution's process for designing learning spaces. Once documented, commonalities and best practices between stakeholders can be identified.

Ideally, this study will serve as a foundation for additional research, either on a larger scale or in alternative frameworks. By providing additional context surrounding learning space design, institutions can better prioritize their needs to ensure access to creative learning spaces while making smart, long-term investments in learning spaces.

Methods

Research Design and Methods

This study will collect data via voluntary, confidential participant interviews. Participants will be invited to participate in interview sessions divided by role (i.e. faculty, staff, students). Guiding discussion questions will be consistent between roles and sessions. Audio from interview sessions will be recorded and notes will be taken during the session.

Study Timeline

The duration of the case study is three months, beginning March 1, 2015.

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Participants will be asked to participate in one of two interview sessions set aside for each role (i.e. faculty, staff, or student sessions). Individual interview sessions will be scheduled to last one hour. Anticipated duration of participation for an individual is one hour. Data analysis is expected to begin following each interview and completed approximately two weeks following the last interview.

*Are these focus group sessions?
i.e. group discussion*

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Procedures Involved

- All participation is voluntary.
- There will be six scheduled, one-hour, semi-structured interview sessions – two sessions for each role. Participants will be asked to attend one session.
- Each session will include an introduction of the principal researcher and interview facilitator(s), a review of the purpose of the interview, and a reminder that participation is confidential and voluntary.
- The session recording will be initiated and note taking will begin.
- The principal researcher will provide guiding questions (consistent between groups) and will request clarification or additional explanation if needed.

Data and Specimen Banking

All session data (including recordings and notes) will be stored in a shared drive folder with restricted access on the UGA network. Access to this folder and its contents will be limited to the primary researcher and project collaborators (including session

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facilitators). Any identifying data on recordings will be converted to pseudonyms (e.g. faculty1, student1, staff1, etc.) in notes and transcriptions. Recordings will be destroyed following analysis.

Data Analysis

A total of 40 participants will be invited to participate in the study; however, the actual number of participants is anticipated to be much lower. Data analysis will use descriptive statistics. The data collected from the interview process will be coded and classified in order to tabulate the findings and reflect the most frequently discussed topics.

References

- Collier, A., Watson, W., & Ozuna, A. (2011). Classroom.Next: Engaging faculty and students in learning space design. *Educause Learning Initiative (ELI)*.
- Whiteside, A., Brooks, D.C., & Walker, J. (2010). Making the case for space: Three years of empirical research on learning environments. *Educause Quarterly*, 33(3), 11.

Good start -
but reviewing
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Appendix

Guiding Discussion Questions

1. Describe the institution's process for requesting and completing a classroom design or renovation project.
2. When beginning a classroom design or renovation project, how does your college or unit determine the priorities for the design?
3. How does the institution's process for classroom renovation align with your college or unit's priorities for classroom design?
4. Do you have suggestions for improving the institution's process to be more aligned with your college or unit's priorities for classroom design?
5. When you run into barriers (physical or institutional) with classroom renovation projects, what strategies does your college or unit use to overcome them?
6. If all barriers were removed, how would you design a classroom?