a refreshing education

Lounge Area

Research Summary

Higher education has changed drastically over the past few decades. Therefore, design considerations for higher education environments require designers to examine the ideological shifts in the academic community. The most effective teaching and learning spaces of the future will be designed around approaches to pedagogy which incorporate collaboration amongst students and faculty in a setting that is both high-tech and high-touch (Neary et al., 2010, p. 24; Gensler, 2012). Each space should be designed to allow for flexibility in individual and collective uses.

Traditional classroom models support an environment of one-way communication, where the teacher provides information to the students through a lecture format (Gensler, 2012). These roles have shifted over time to allow the students to have a proactive role in their education (University of Michigan, 2011). Today, students have grown up using technology to augment their in-class activities and have driven the trend of online learning (Gensler, 2012).

Warger and Dobbin suggest that "technology has played an important, if not entirely anticipated, role in shifting emphasis within the scope of faculty behavior and tasks" (2009, p. 9). With more resources available digitally, educators guide students to access these sources which supplements their in-class curriculum (Barseghian, 2010). Because they rely on these technologies for content delivery, students now want more personal interactions in the classroom to use and apply this knowledge (Gensler, 2012). Because of the shift in teaching styles, integration of technology, and group learning atmosphere that college classes should have , the existing facilities fall short of today's expectations (Steelcase, 2010). This creates the need for classrooms to support collaborative activities that allow students to share ideas and "to fully participate in activities with others as they acquire knowledge for themselves" (Lippman, 2006, p. 1). Though educators make themselves available through electronic communications, students still engage with them mostly in the classroom. The size of classroom spaces and their configurations should allow for flexibility in educational methods so teachers can facilitate more student interaction (Steelcase, 2010). As students' communication methods have evolved and the desire for social interaction within the learning environment has increased, research suggests that study methods are more individualized. A research study conducted by Gensler (2012) revealed that 71% of students surveyed (250 students representing 116 universities) preferred to study independently. Additionally, students reported that "study-alone time is fundamental to the student experience; campuses need to give students ample appropriate environments" (Gensler, 2012).

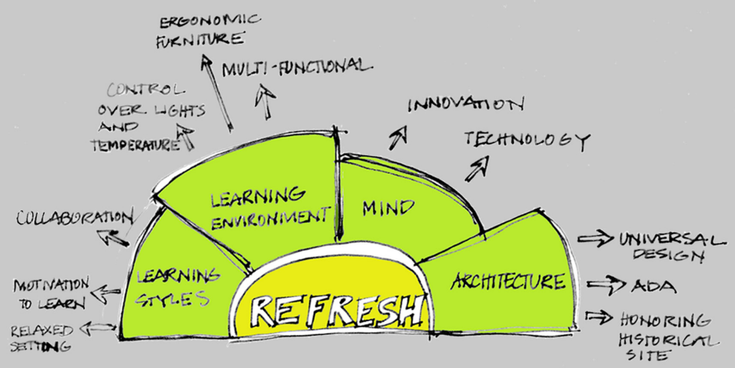
Because of the variety of needs students bring to their learning environment, the higher education design needs to provide adaptable and flexible spaces for all activities and all users (Warger, & Dobbin, 2009, p. 6). Key strategies for achieving flexibility are through environmental features that can support mobility, including wireless technology and the use of multifunctional furniture pieces (Pinder et al., 2009, p. 7). Learning spaces should allow the users to reconfigure for a variety of classroom and interactive arrangements (MacPhee, 2012). Traditional learning environments no longer fulfill the needs of contemporary educational methods. As a result, innovative solutions need to enhance the overall student experience.

In order to facilitate the shift that is occurring in today's college and universities, innovative concepts need to be implemented such as collaborative features, flexible, multi-functional spaces, and technological advances. This higher education space will allow students and faculty to have greater control over their education and more functional, inviting spaces to learn independently and cooperatively.

Study Area

Concept Statement

Limes are citrus fruits that symbolize fresh, energizing, and exciting flavors. This higher education space will be renovated with the same principles in mind. Historic buildings provide opportunities to refresh the spaces with contemporary elements, while honoring existing architectural features. Innovating higher education means refreshing the physical environment through integrating multi-functional spaces, technological advancements, and enticing collaborative and private spaces. These spaces' physical features will excite students and promote academic growth.



Goals

Sustainability--To honor the historical context and the resources of the existing space and acknowledge the values of the educational organization.

Collaboration --To foster communication and cooperative learning for the students and faculty.

Inclusivity -- To promote easy use and appeal to a wide variety of people within the space.

Innovation -- To integrate new technology into the higher education environment that changes the way people view traditional learning methods.

Inspiration -- To inspire learning and personal growth of the students and faculty.

References

(2011, February 17). University of Michigan - Case study. Retrieved from http://www.youtube.com/watch?v=cbo1paLtYHk/

(2012). Changing course: Connecting campus design to a new kind of student. Gensler. Retrieved from http://www.gensler.com/education/

Barseghian, T. (2010). How would you design the modern classroom? Mind Shift. Retrieved from http://blogs.kqed.org/mindshift/2010/10/how-would-you-design-the-modern-classroom/

Lippman, P.C. (2006). The L-shaped classroom: A pattern for promoting learning. DesignShare. Retrieved from http://www.designshare.com/index.php/articles/the-l-shaped-classroom/

MacPhee, L. (2012). Learning spaces. Northern Arizona University. Retrieved from http://jan.ucc.nau.edu/lrm22/learning_spaces

Neary, M., Harrison, A., Crellin, G., Parekh, N., Saunders, G., Duggan, F., Williams, S., & Austin, S. (2010). Learning landscapes in higher education. University of Lincoln. Retrieved from http://www.learninglandscapes.lincoln.ac.uk/

Pinder, J., Parkin, J., Austin, S., Duggan, F., Lansdale, M., Demian, P., Baguley, T., & Allenby, S. (2009). The case for new academic workspaces. Academic workspace. Retrieved from http://www.academicworkspace.com/

Steelcase (2010). Innovation enters the classroom. 360 Steelcase. Retrieved from http://360.steelcase.com/articles/innovation-enters-the-classroom-2/

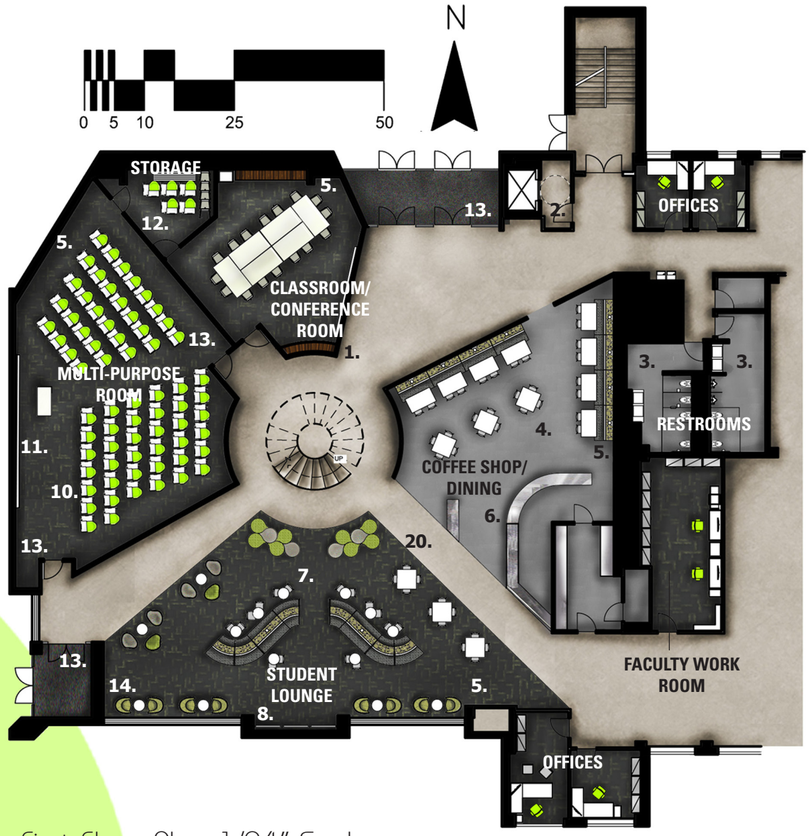
Warger, T. & Dobbin, G. (2009). Learning environments: Where space, technology, and culture converge. Educause: Learning initiative. Retrieved from https://online.ksu.edu/COMS/ player/content/IDH_651/content/modules/IDEC%20Competition/Learning%20Enviroments.pdf

Plan Annotations

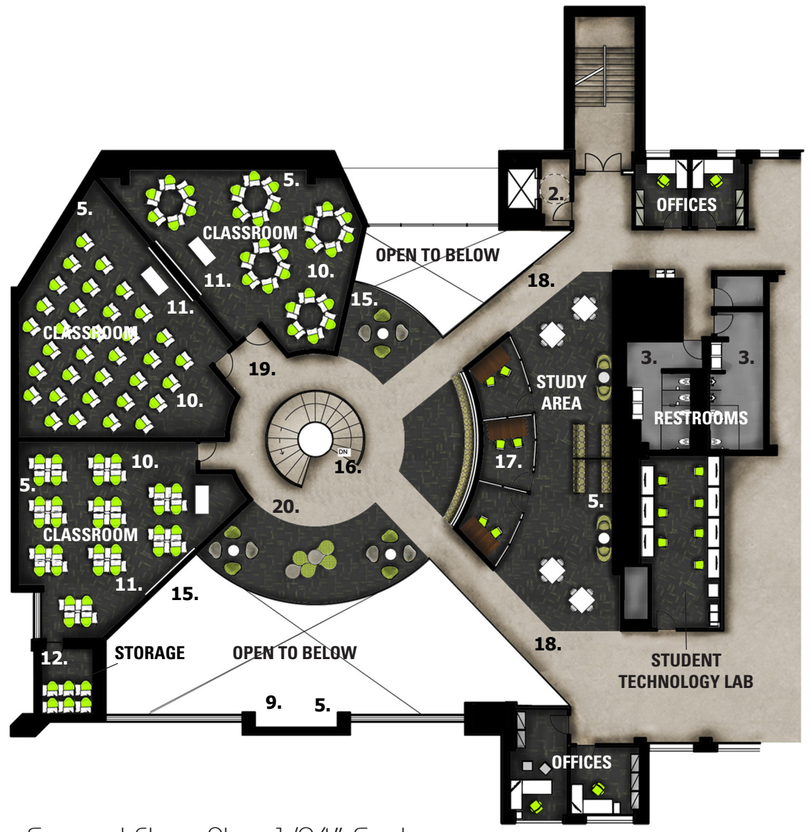
1. **U-** Visitor information posted and easily accessible from the entrance
2. **LS & U-** Accessible Elevator
3. **LS & U-** ADAAG Compliant Restrooms
4. **U & F-** Seating in Dining/Coffee Shop area allows for eating, studying, or socializing, also all wheelchair accessible tables
5. **S-** Existing wood and brick walls honored and featured in design
6. **U-** Counter height at 34" A.F.F. to meet ADAAG
7. **U & F-** Flexible furniture can be reconfigured to different arrangements and is wheelchair accessible
8. **F-** Interactive touch screen televisions to engage students and visitors
9. **LS-** Acoustical panels to reduce excess sound in two-story space
10. **U & F-** Mobile Seating in Multi-Functional Space- can be rearranged for class discussions, speakers, and campus events, also wheelchair can replace node chair easily
11. **F-** Multi-Media projection system in all classrooms- facilitates learning from variety of sources
12. **F-** Storage Room holds extra tables and chairs for rearranging multi-functional spaces
13. **LS & U-** Multiple accessible exits to meet International Building Codes and ADAAG
14. **LS-** Southern windows allow natural light and views from first and second floor spaces
15. **LS-** Clerestory windows allow classrooms to receive natural light
16. **LS-** Skylight above stairs adds to natural light
17. **F & S-** Individual study rooms provide quiet space to study or complete online class work
18. **LS-** Circulation provides appropriate means of egress for users and access to other parts of the building
19. **S-** Second floor maximized to take full advantage of 20' ceiling with future spatial needs considered
20. **U & LS-** Floor material transitions define spaces and circulation to support intuitive wayfinding

Design Criteria

S- Sustainability and Respect to Historical Setting
U- Universal Design and Inclusivity
LS- Life Safety, Health, and Welfare
F- Flexible and Multi-Use Features



First Floor Plan 1/24" Scale

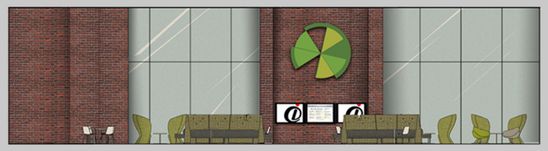


Second Floor Plan 1/24" Scale

21. **F-** Hightower LeMur- defines space in open areas, privacy and acoustical control with high upholstered back, modular system easily rearranged
22. **S & LS-** Design Tex Palette- Pewter Light, 100% Wool, Abrasion 50,000 Double Rubs, Rapidly Renewable, Low Emitting Materials
23. **F & LS-** Steelcase Node- casters allow for mobility and flexibility, comfort without upholstery so easy maintenance and cleaning, base storage keeps bags out of the aisle, MBDC's Cradle to Cradle Silver certification, BIFMA level 2 certification, Indoor Advantage Gold from SCS for indoor air quality
24. **S & LS-** Maharam Ditto- Fern, 77% Post-Consumer Recycled Polyester, 23% Solution-Dyed Nylon, 60,000 Double Rubs, PFOA-Free Stain Resistant Finish, Contributes to LEED for Recycled Content and Low Emitting Materials, Greenguard and Greenguard Children & Schools Certified
25. **LS-** Steelcase Cobi Task Chair- Flexing back allows users to shift in any position for maximum comfort
26. S- Maharam Highfield by Kvadrat- 100% Trevira CS Polyester, 40,000+ Double Rubs, Contributes to LEED for Low Emitting Materials
27. **LS-** Hightower K2 Lounge Chair- Meets requirements for Cal 133 Fire Code
28. **S-** Maharam Mimic- Clay, 100% Polyurethane with Silane-Based Antimicrobial, 1,000,000+ Double Rubs, contributes to LEED IEQ Credit 4.5 for Low Emitting Materials, Greenguard and Greenguard Children & Schools Certified
29. **LS-** Hightower Shelter Chair- Meets requirements for Cal 133 Fire Code, enclosed seat for individual studying
30. **S-** Design Tex Palette- Lawn, 100% Wool, Abrasion 50,000 Double Rubs, Rapidly Renewable, Low-emitting
31. **F & LS-** Hightower Nimbus Seating- Movable casual seating, meets requirements for Cal 133 Fire Code, manufactured using all regional materials within 500 miles
32. **S & LS-** CF Stinson Pathways- Spiral, 88% post industrial recycled polyester, 12% post consumer recycled polyester, Crypton Green for stain resistance, flame resistant, heavy duty abrasion resistance 50,000 Double Rubs, moisture barrier, mildew resistant
33. **F-** Steelcase Airtouch Instructor Station- easily adjustable for seating or standing height
34. **S & LS-** Steelcase Enea Lottus Guest Chair- SCS Indoor Advantage™ Gold certified for indoor air quality, USGBC LEED EQ4.5 (furniture and seating), 14% recycled content, 100% recyclable
35. **F, S & U-** Steelcase Akira Tables- Multi-purpose table with castors that folds and stores compactly, adjustable height, 71% Recycled Content, SCS Indoor Advantage Gold Certified
36. **S- Iris US** Urban Grigio Ceramic Tile- GreenGuard Certified, Made in the US,18"x18"
37. **S- Iris US** Ocean Storm Ceramic Tile- GreenGuard Certified , 64% Pre-Consumer Recycled Materials, Made in the US, All materials quarried within 325 miles of Crossville, TN, 18"x18"
38. **S-** Paper Stone Gunmetal Countertop- 100% post-consumer recycled paper and PetroFree™ phenolic resins and natural pigments, certified to Forest Stewardship Council Standards, longer life because it is scratch, dent, and chip resistant
39. **S-** Shaw Contract Group Abstract Edge Carpet Tile- MBDC Cradle to Cradle Silver Certified, 40% Recycled Content, Recyclable Product and Packaging, 18"x36" Tile
40. **S & LS-** Kirei Bamboo Veneer- Rapidly renewable resource, made using a low-or no-added formaldehyde MDI adhesive, low-emitting product so it promotes better indoor air quality
41. **S & LS-** Hightower Monolite High-Back Booth- creates greater level of privacy for individual studying, assembled with water based glue, meets requirements for Cal 133 Fire Code

Finishes and Furniture

Dining Area



Lounge Elevation 1/24" Scale

Dining Elevation 1/24" Scale