

Driving Questions from Architects

Learning Spaces Collaboratory Roundtable
Spring 2016: Focusing on the Future of Planning Learning Spaces
Boston University

Notes:

- A.**
 - 1. How to promote active learning environments—in classrooms and in teaching labs. What does it take to promote small group peer-to-peer interaction and learning?
 - 2. How can a space promote interdisciplinary problem-solving? How can spaces promote investigative, cross-disciplinary problem-based learning?
 - 3. What does a “technology-rich” learning environment mean? What are the tools needed in the learning spaces to prepare students for increasing technology-dependent careers. How many ways and places can technologies be used in a facility to serve the campus community as well as to support outreach beyond the campus?
 - 4. In our planning, how can we exploit opportunities for sharing, for breaking down departmental silos for maximizing the use of flexible or case method classrooms, student and administrative space? Does it work to distribute disciplinary throughout the building rather than clustering them by floor? What needs to be next to what?
 - 5. How can a goal of increasing success of lower division STEM students success in STEM disciplines be addressed in the planning process? What does it take to attract students to these fields and motivate them to persist (assist them).
 - 6. How do our spaces reflect the social nature of learning, the need for collegiality, the unplanned interactions and conversations that shape and nurture communities?
- B.**
 - 7. How can we design for the future and encourage innovation and new ways of learning?
 - 8. How do we create an environment of entrepreneurial thinking, with the vibrancy and experimentation atmosphere of the West coast combined with the structure and richness of the Northeast academic history?
 - 9. How can we create awareness, connections and encourage collaboration through our architecture?
- C.**
 - 10. What are the space planning criteria for this learning environment? How will instructors and teaching assistants interact with students in the physical and virtual spaces? How will students interact with one another and with the room’s advanced technology?



Notes:

11. What do we know about what works now (or does not) in spaces to be renovated? What is our common vision about 'game-changing' spaces? What affordances will best support formal and informal learning activities, and problem-driven learners and learning?
 12. How will people come and go throughout the building?
 13. What opportunities might surface in the planning to signal to the larger academic community campus-wide about the value of new types of learning spaces, about the value of this new facility to the institution at large? How will this new space be accessed and utilized by the University community?
- D.**
14. To enhance the educational experience, specifically for a large student population, what elements need to be considered in planning a learning community?
 15. How have technological advances in the science workplace changed the design of an undergraduate curriculum? How does this reshape space for different types of learning?
 16. How does a need for efficiency drive operations and space planning?
 17. How big is too big?
 18. How do we rigorously and responsibly plan for an unknown future?
 19. To support student success, what elements and adjacencies should an institution/design team consider for an academic building?
- E.**
20. How do we get faculty and students to move throughout the building? How do we get students to stay within it?
 21. How can the project accommodate more than just science?
 22. What are the "third spaces" needed to encourage collaboration?
 23. How do you accommodate for materials and equipment necessary for instruction or research in a flexible classroom or lab?
 24. How is shared space operated or maintained in a transdisciplinary space?
- F.**
25. How can existing spaces remain functional during renovation and expansion activities?
 26. How can a STEM facility accommodate both collaborative learning and didactic instruction?
 27. How can a STEM facility support learning outside of structured instructional spaces?
 28. How can faculty and student spaces be organized to maximize interaction without disruption?
 29. How can a STEM facility be inviting and attractive to non-STEM students?
 30. How can research and teaching functions be integrated by our planning of spaces?



Notes:

- G. 31. What are the beneficial impacts/synergies of blending library and campus center programs?
- 32. Can a mixed-use building save money and space by capitalizing on those impacts / synergies?
- 33. Do these programmatic overlaps intensify the use of the building? Is there increased use of the library by more diverse groups?
- 34. Can learning spaces be shared effectively between departments and programs?
- 35. What is the right balance of food and social space to animate learning spaces?
- 36. Do adjacent outdoor terraces and porches really enhance learning spaces in temperate climates?

- H. 37. How can we take better advantage of distributed, underutilized campus spaces?
- 38. How can we showcase STEM programs at work?
- 39. How can we make industry partnerships work to our advantage?
- 40. How can we attract the next generation of STEM students?
- 41. How can we plan for future flexibility while managing a limited budget?
- 42. How can a single space be shared among multiple stakeholders and program roles?

