Industry Interface Spaces

As more private research funding flows into higher education, institutions create different types of space for interaction between students, faculty, and private business.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Student-Facing Incubators</th>
<th>IP-Transfer Incubators</th>
<th>Private Research Partnership Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give students real-world experience</td>
<td>Better monetizable IP</td>
<td>Expand research and funding sources</td>
<td></td>
</tr>
</tbody>
</table>

Co-working Space

Flexible and Shared Research Labs

Institutions increasingly move to bench-style labs that serve multiple researchers, promote collaboration, and provide high flexibility to accommodate turnover without reconfiguration.

- Moveable, modularizable benches
- Moveable casework
- Lighting control, with black-out option
- Fume hoods
- Casemakers
- Reverse osmosis system

Case Study: University of Toronto’s Facilities Department

- 30% Reduction in number of closed offices
- 25% Decrease in workstation size
- Enhanced Staff Satisfaction: No Impact
- Derived Impact

Administrative employees increasingly work in more open-layout floorplans with cubicles or benches, benefiting productivity and teamwork.

Corporate-Inspired Office Spaces

- Administrative offices with in-cubator workstations
- Customized furniture
- Enhanced comfort, collaboration, and connectivity

Installations of standard equipment package minimizes future customization:

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300 square feet per researcher in UCB Boulder’s shared labs

97% of University of Alberta’s researchers in shared lab space

Makerspaces

Makerspaces allow students to convert their ideas into physical objects, supporting hands-on learning and cross-disciplinary collaboration.

Case Study: Case Western’s Sears think[booth]

- 12 Patents procured
- Funding raised through venture capital, other campaigns across 12 patrons

Libraries

Less space is dedicated to shelving; it’s instead repurposed for other student needs, focusing on comfort, collaboration, and connectivity.

Typical 2015 Library Space Allocation

- 19% Study Space
- 18% Instructional Services
- 16% Instructional Support
- 15% Writing Center
- 0.75% Food

Active Classrooms and Learning Spaces

Institutions continue to invest in luxury-style halls to compete with private developers and boost enrollment, but increase emphasis on collaboration and community-centric halls that boost freshman and sophomore retention.

- Acoustic dampeners
- Multiple monitors around classroom
- Screen-sharing technology for faculty to pull up student screens

Community-Centric Residence Halls

Institutions continue to invest in luxury-style halls to compete with private developers and boost enrollment, but increase emphasis on community-centric halls that boost freshman and sophomore retention.

-acd

Estimates of the student housing market

$4B-$5B

Case Study: BGSU’s Emphasis on Communal Space Drives Retention Rate

- New residence hall design emphasizes community spaces like lounges, study and social spaces, and kitchens, which constitute 50% of square footage

- 35% Extra space needed for a typical active classroom.

- 300 square feet needed for a typical active classroom.

- Whiteboards on walls
- Swivel chairs or chairs with wheels
- Group tables or reconfigurable tables
- Netted flooring
- Acoustic dampeners
- Multiple monitors around classroom
- Screen-sharing technology for faculty to pull up student screens

Impact on Learning Outcomes

- High
- Moderate
- Low

Resource Intensiveness

- Low
- Medium
- High

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Impact on Learning Outcomes

- 25% 15%
- 30%

Admired Space

- Communal Space

Impact on Learning Outcomes

- 25%
- 15%

Enhanced Study

- 90%
- 60%
- 30%

Flexibility

- 90%
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