Dana Gierdowski
North Carolina State University
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Goal for Writing the Chapter

To consolidate & synthesize a variety of empirical studies to assist others when planning studies/ assessments of learning spaces. I limited the content to studies in higher education and chose studies that represented a variety of methods and perspectives.

Key Takeaways

- Employ a **mixed methods** approach for triangulation and aggregation
  - Key studies regarding the SCALE-UP model – "Student-Centered Active Learning Environment with Upside-down Pedagogies" from physics education researchers (Beichner, et al.)
- Avoid **learning outcomes** as a *sole* variable
  - the connections drawn "between space design and learning outcomes [are] weak at best" and can frequently hide multiple factors (Temple, 2008, p. 237).
  - "we cannot separate out the participants, the activities and the contexts in analyzing how space works; to do so is to over-simplify and potentially misunderstand" (Boys, 2011, p. 129).
  - Brooks (2012) cautions that we should "be suspicious of over-simplified interpretations of these results that might attribute agency to what is really an inert physical space, thereby suggesting that the space directly caused increased levels of learning" ("Space and consequences," Literature Review section, n.p.)
- Employ **innovative methods** – the study of library spaces
  - Foster and Gibbons (2007) - flipchart responses, design workshops, mapping diaries, photo surveys
- The benefits of **ethnography**
  - Boys' (2011): ethnography can capture the "sophistication of participant responses" versus simple "likes and dislikes" of the physical properties of the space (p. 87).
  - Melhuish (2011a): "Different individuals' experience of embodiment within particular settings and their perception and response of the same settings may differ considerably, reflecting differences in age, gender, personality, physical characteristics and cultural and social experience" (p. 23)

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