**Learning Spaces**

This teaching guide contains a variety of information for those thinking about innovative learning environments. The development of computer technologies (such as the Internet) combined with the shift from a *transmission* notion of teaching and learning towards a*constructivist* notion of teaching and learning has led to a re-thinking about what constitutes an effective learning environment (see [Malcolm Brown’s article](https://cft.vanderbilt.edu//cft/guides-sub-pages/learning-spaces/#learning_spaces) below for a full exploration of these themes).

Few classrooms in higher education incorporate aspects of design and technology (computer technology as well as furniture technology) that maximize the potential for teaching and learning. This teaching guide is an attempt to collect together links to articles, examples, and other resources reflecting the current best thinking about the possibilities for learning spaces that truly maximize the potential for teaching and learning.

**General Resources**

* [Buildings & Grounds](http://chronicle.com/blogs/buildings/) – This *Chronicle of Higher Education* blog covers campus architecture.
* [EDUCAUSE’s Learning Space Resources](http://www.educause.edu/library/learning-space) – EDUCAUSE is an association focused on technology in higher education, and they offer a variety of resources on learning space design.
* [Learning Spaces infoKit](http://www.jiscinfonet.ac.uk/infokits/learning-spaces/) – This resource is provided by the Joint Information Systems Committee (JISC), a UK-based organization supporting education and research. Of particular interest on this site is a 36-page PDF document entitled “[Designing Spaces for Effective Learning: A Guide to 21st Century Learning Space Design.](https://s3.amazonaws.com/vu-wp0/wp-content/uploads/sites/59/2018/04/04094719/learningspaces.pdf)“
* [Learning Spaces Collaboratory](http://www.pkallsc.org) – The LSC’s goal is to “translate findings from contemporary research and practice in the field into roadmaps for shaping and assessing built environments for learning in the undergraduate setting.”
* [Guidelines for Learning Spaces](http://www.crlt.umich.edu/learningspaceguidelines/index) – The Center for Learning and Teaching at the University of Michigan has an excellent guide to designing campus learning spaces.
* [National Clearninghouse for Educational Facilities](http://www.ncef.org/%22%20%5Ct%20%22_blank) – Unfortunately, the NCEF is no longer funded, but its website archives a variety of resources on learning spaces and facilities.

**Articles**

* [Flexible Classrooms: Highlights from #Spaces4Learning](https://cft.vanderbilt.edu/2013/12/flexible-classrooms-highlights-from-spaces4learning/) – This blog post by CFT director Derek Bruff features a few reflections on a learning spaces event hosted at Peabody College in December 2013.
* [Commons 2.0: Library Spaces Designed for Collaborative Learning](https://er.educause.edu/articles/2007/11/commons-20-library-spaces-designed-for-collaborative-learning) Bryan Sinclair of the University of North Carolina at Asheville discusses ways in which today’s libraries must adapt to the Web 2.0 world and become collaborative and interactive spaces that foster student learning in new and creative ways. This article originally appeared in a 2007 edition of the *Educause Review.*
* [Flexible Space & Built Pedagogy: Emerging IT Embodiments](http://www.torinmonahan.com/papers/Inventio.html%22%20%5Ct%20%22_blank) This paper analyzes the convergence of information technology infrastructures and traditional educational spaces and proposes flexible criteria for material-virtual, hybrid learning environments. Torin Monahan developed the concept of built pedagogy to account for the ways that built environments teach values through their constraints upon social action and interaction and suggest ways that the built pedagogies of hybrid spaces can facilitate learning by inviting students and teachers to participate in the continual re-design of learning structures. This paper was published in the *Inventio*journal at George Mason University in 2002.
* [Leading the Transition from Classrooms to Learning Spaces](https://er.educause.edu/articles/2005/1/leading-the-transition-from-classrooms-to-learning-spaces) In this 2005 *Educause Quarterly* article, author Diana Oblinger discusses the changing notion of the classroom and provides a guideline to administrators who are directly or indirectly involved in the development of learning spaces.

* [Learning Spaces](https://s3.amazonaws.com/vu-wp0/wp-content/uploads/sites/59/2010/06/04095302/learningspaces-malcolm-Brown.pdf) In this chapter from the 2005 Educause book [*Educating the Net Generation*](https://www.educause.edu/research-and-publications/books/educating-net-generation), Malcolm Brown explores some of the challenges presented by “net generation” students and the opportunities provided by new instructional technologies and changing ideas about how people learn. The article includes three scenarios for ways in which innovative learning spaces can transform our ideas about teaching and learning.
* [Learning Spaces: More than Meets the Eye](http://www.educause.edu/ir/library/pdf/eqm0312.pdf%22%20%5Ct%20%22_blank) This brief article discusses the shift of focus from “classroom” to “learning space” brought about by the integration of technology into teaching and learning. It originally appeared in a 2003 edition of *Educause Quarterly.*
* [The Psychology of Learning Environments](http://www.educause.edu/ir/library/pdf/PUB7102f.pdf) In this chapter from the 2006 Educause book *[Learning Spaces,](http://www.educause.edu/ir/library/pdf/PUB7102f.pdf%22%20%5Ct%20%22_blank) author Ken Graetz* uses the fictitious setting of a classroom at Hogwarts School of Witchcraft and Wizardry to explore a few of the fundamental ideas of environmental psychology and their relation to teaching and learning.
* [Radical Flexibility and Student Success](https://er.educause.edu/articles/2006/1/radical-flexibility-and-student-success-an-interview-with-homero-lopez) Dr. Homero Lopez, founding president of Estrella Mountain Community College in Arizona, discusses with Educause Vice President, Diana Oberlin, his institution’s approach to designing learning spaces that engage students using a concept he calls “radical flexibility”. This interview was shared in the January/February 2006 edition of*Educause Review.*

**Edited Volumes and Books**

* [The Importance of Physical Space in Creating Supportive Learning Environments](http://www3.interscience.wiley.com/journal/102522291/issue%22%20%5Ct%20%22_blank) A special issue of *New Directions for Teaching and Learning* published in Winter 2002.
* [Learning Spaces, an Educause eBook](https://www.educause.edu/research-and-publications/books/learning-spaces) In addition to the e-book’s core chapters on learning space design principles (chapters 1–13) , this site also offers case studies illustrating those principles (chapters 15–43), including links to examples of innovative learning spaces.
* [In Sync: Environmental Behavior Research and the Design of Learning Spaces](https://escolaecofeliz.files.wordpress.com/2016/03/in_sync_environment_behavior_theory_and.pdf) by Lennie Scott-Webber, Society of College and University Planning, 2004.

**Examples of Innovative Learning Spaces**

* [Standford’s Wallenberg Hall](http://wallenberg.stanford.edu/index.html%22%20%5Ct%20%22_blank) Wallenberg Hall includes 4 classrooms, a learning theater and a variety of breakout spaces. The classrooms and the learning theater are equipped with the latest instructional technologies to facilitate teaching and learning. The Wallenberg Hall website includes a variety of information about ongoing projects, examples of innovative uses of the classroom spaces, and more.
* [VUMC Strategy and Innovation Office](http://www.mc.vanderbilt.edu/vcbh/%22%20%5Ct%20%22_blank) The Center for Better Health includes ten-thousand square foot facilities designed for groups of 2 to 140 people to work collaboratively. The furniture and environments were designed and built by [Athenaeum International](http://www.aiboulder.com/%22%20%5Ct%20%22_blank).
* [Vanderbilt Center for Teaching](https://cft.vanderbilt.edu/about/location/our-new-space/) In the summer of 2008, the Center for Teaching relocated to a new space designed to create a vibrant, inviting and flexible learning environment, open to the entire Vanderbilt teaching community.