APPENDIX 9.5

LEARNING SPACE DESIGN
THEORY AND PRACTICE

Learning Space Design Theory and Practice

Malcolm Brown

Perhaps for as long as academicians have been conducting research, a challenge has been how to take the harvest from research and apply it in practice. This bridging (or perhaps mapping) of learning theory to practice is still the key for any department or institution that is striving to design or redesign its learning spaces. The first two articles in this issue of *EDUCAUSE Review* clearly make this point. It is vital to give coherence and consistency to the design of learning spaces by balancing learning theory, faculty and student culture, institutional goals, and resources, all in the face of a rapidly changing digital environment.

The table below is an attempt to map from the Net Generation's characteristics to learning theory, and then from theory to learning space applications and the technology that might support those applications. Like any other document that points to specific technologies, it has a short shelf life. But the table calls attention to the need to have learning space design informed by a number of factors; and it thus provides a point of departure for campus design teams embarking on the task of facilitating current and future teaching and learning activities. Experience has shown that it is perilous to try to move directly from research to practice. Only when cultural, social, and institutional factors are considered can opportunities and possibilities emerge for the design of learning spaces, formal and informal, that work for both students and faculty.

Malcolm Brown is Director of Academic Computing at Dartmouth College.

Net Gen Trait	Learning Theory Principles	Learning Space Application	IT Application
Group activity oriented	Collaborative, cooperative, supportive	Small-group work spaces	IM chat; virtual whiteboards; screen sharing
Goal and achievement oriented	Metacognition; formative assessment	Access to tutors, consultants, and faculty in the learning space	Online formative quizzes; e-portfolios
Multitaskers	Active	Table space for a variety of tools	Wireless
Experimental; trial-and-error learners	Multiple learning paths	Integrated lab facilities	Applications for analysis and research
Heavily reliant on network access	Multiple learning resources	IT highly integrated into all aspects of learning spaces	IT infrastructure that fully supports learning space functions
Pragmatic and inductive	Encouraging of discovery	Availability of labs, equipment, and access to primary resources	Availability of analysis and presentation applications
Ethnically diverse	Engagement of preconceptions	Accessible facilities	Accessible online resources
Visual	Environmental factors; importance of culture and group aspects of learners	Shared screens (either projector or LCD); availability of printing	Image databases; media editing programs
Interactive	Compelling and challenging material	Workgroup facilitation; access to experts	Variety of resources; no "one size fits all"

Adapted from Table 2 in Malcolm Brown, "Learning Spaces," chapter 12 of *Educating the Net Generation*, ed. Diana G. Oblinger and James L. Oblinger (Boulder, Colo.: EDUCAUSE, 2005), e-book, available at <http://www.educause.edu/LearningSpaces/6072>.