9.5  Learning Space Design
Theory and Practice
Perhaps for as long as academi-
cians have been conducting re-
search, a chal-
lenge has been
how to take the harvest from
research and apply it in prac-
tice. 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 re-
design its learning spaces. The
first two articles in this issue
of *EDUCAUSE Review* clearly
make this point. It is vital to
give coherence and consis-
tency 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 technol-
ogy that might support those
applications. Like any other
document that points to spe-
cific technologies, it has a
short shelf life. But the table
calls attention to the need to
have learning space design in-
formed by a number of fac-
tors; and it thus provides a
point of departure for cam-
pus design teams embarking
on the task of facilitating cur-
rent and future teaching and
learning activities. Experi-
ence has shown that it is per-
lous 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.

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Academic Computing at Dart-
mouth College.*

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