In planning physical environments for learning, a sandbox can be a metaphor for a gathering or space designated for exploring approaches to enhance learning in ways different from standard practice in a given institutional context.

Sandboxing as a workshop process is intended as a learning experience for a diverse set of on-campus stakeholders. It becomes an experimental venue for exploring hypotheses about how learning happens and about how space matters to learning.

The hoped-for outcome of the experiment is that stakeholders arrive at a shared understanding of the ideal learning environment for students in the context of a particular experience, program and/or community and develop a shared commitment to realize such conditions. If learning happens best by “practicing” doing, a sandboxing approach affords faculty and students—and many others—extended opportunities to become comfortable with unfamiliar pedagogies, emerging technologies, or different ways of connecting the dots between the what, how, and where of 21st century learning for undergraduates in all fields, from diverse backgrounds and with diverse career aspirations.

As an experiment, sandboxing requires attention to critical dimensions of the current reality—within and beyond a particular department, division or campus. This involves: gaining deep knowledge about current practice on the campus; determining what research-based pedagogies are being explored and adapted; finding out what data are being gathered about student persistence and success; and identifying what evidence is surfacing about how space influences learning.

Equally important, sandboxing benefits from awareness of research findings from the learning sciences and the cognitive sciences about the experience of learning, as well as lessons learned from the work of colleagues at other institutions pursuing the goal of a transformed undergraduate learning environment.

Sandboxing can become a forum for uncovering and sharing potentially significant insights from emerging research fields and for beginning to articulate new, somewhat audacious questions to drive institutional planning into the future. This workshop method offers an intriguing opportunity to explore and gain a deeper understanding of potentially disruptive approaches for shaping future learning environments.

The process of sandboxing begins with asking questions like these:

- What are our measures of successful learning?
- What are our measures of a successful space for learning?
- What would we like to do with our spaces but cannot do now?
- If we could challenge ourselves to conceive of more optimum learning environments, how would we describe them?

1 As defined by Shirley Malcom, with the American Association for the Advancement of Science (AAAS), disruption is a necessary dimension of innovations that are transformative and sustainable.
A sandbox process is:

- an efficient and cost-effective approach to engage the broader campus community in imagining spaces that go beyond current mental images about how learning happens and that enable robust learning
- a method to experiment with alternative ways to envision, organize, and equip physical learning environments for 21st century learners
- a creative conversation explicitly intended to inform future planning, setting the stage for more comprehensive and permanent transformation of spaces for learning across a campus.

A sandbox as a physical space:

- is an experimental venue that can be stripped of the affordances that limit its use to standard practice and fitted out to enable new activities, whether a mock-up with modest investment or with design as a working pilot space
- must be imagined, identified, and designed in ways that reflect the language and vision of stakeholder groups about future spaces for learning that will serve institutional goals more effectively and creatively
- can showcase alternative models and measurable approaches to move beyond standard practice for shaping spaces to serve 21st century learning, in which to imagine and create the future—for both individual learners and for the institution
- signals to all stakeholders—not only to faculty, students and staff but also to prospective students and donors—that the institution has a clear vision of how learning happens, is open to new approaches and possibilities for embracing its future, and comfortable with exploring at the edges to prepare students for a world in which standard practice is no longer acceptable.

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