

Learning Space Design Precepts and Assumptions

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Systems design for the learning space is a complex process. Throughout the process, decisions are made with respect to function, performance, cost, technology standards, operations, maintenance, and numerous other variables. It is even possible that the people who begin the design process will not be those who complete it. A valuable first step is to engage the project's stakeholders in developing a set of guidelines to enable future decision-making as the project progresses from concept development through implementation. These guidelines consist of both precepts and assumptions.

Precepts

A precept is *a rule or principle prescribing a particular course of action or conduct*. Design precepts describe the overall environment in which the learning space is being developed and help suggest the context in which the design team will formulate the project. Example design precepts:

- New user interfaces are proliferating.
- The future of computing rests on a wireless “always on” mobile network connection.

- Wireless networking technology is advancing rapidly.
- Mobile computing devices are becoming smaller, cheaper, more powerful, and better integrated.
- Students and faculty are often nomadic.
- The research and educational environments hold major transformation potential.
- Intelligent systems and facilities are predicated on personal profiles and wearable devices or cards.
- Technical assistance should be provided whenever and wherever needed.

Assumptions

An assumption is *something taken for granted or accepted as true without proof; a supposition*. Planning or design assumptions provide direction to the design team and also act as a sounding board when hard decisions have to be made. Projects often encounter budget difficulties, programmatic changes midstream, and/or other events that can force the design team to reevaluate the project. Design assumptions provide the context for making those “value-engineering” decisions. Example design assumptions:

- Classroom spaces will provide instructional tools to support both technology-

enhanced and traditional teaching styles.

- A “universal” instructor’s user interface for technology systems is both desirable and necessary. This facilitates ease of use, faculty training, technical support, flexibility in room scheduling, and long-term systems evolution.
- Flexibility is required so that classrooms can be easily configured for different instructional styles from class period to class period, as well as within each class period. The notion of flexibility should also be considered in the long term, to enable the systems to adapt over time to changes in curriculum, teaching and learning styles, and technology advances.
- The project will strive to implement advanced technologies whenever possible, recognizing that the systems must support state-of-the-art education yet also provide backward-compatible technologies to support existing archives and content libraries.
- The technology systems must be supportable by technical personnel and financial resources.
- The technology environment will promote the concept of shared resources and will facilitate the development and deployment of digital media across the college/university network.
- The project will strive to deliver seamless integration of AV, IT, and other technology.
- There will be a fluid integration of synchronous and asynchronous resources and activities.
- Bandwidth will not be a limiting factor.
- Technology solutions will support and enable the design precepts.
- Technology solutions will be scalable, insofar as a system in a small classroom will share attributes with a system in a large lecture hall, which will share attributes with a building-wide system, which will share attributes with a campus-wide system.

Together, such learning space design precepts and assumptions provide a road map for the design team and enable good decision-making by project leaders. The effort invested early in the process will pay big dividends by the time the project is completed.

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