The ABCs of Facility Studies in the 21st Century: It's More Than Just Numbers

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Objectives

1. Participants will be able to identify the traditional components of a facility study.

2. Participants will be able to explain the characteristics of the 21st century learners and how they acquire 21st century skills.

3.Participants will identify appropriate physical environments for 21st century instructional (A) and behavioral strategies (B).

4.Participants will identify effective ways to engage the community, both internal and external stakeholders, in the discussion(C).

5.Participants will generate design characteristics (D) to support the ABCs.

Traditional Facilities Study

The SFP identifies the type, quantity and location of spaces needed by the organization and contains two main components—the first being an in-depth analysis of existing facilities, and the other an achievable and affordable plan to meet the organization's needs.

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From the Planning Guide - NCES

It should include data on all facilities, infrastructure, grounds, maintenance staff (e.g., specialized training courses attended), and equipment (including boilers, HVAC systems), floor finishes, plumbing fixtures, electrical distribution systems, heating and air conditioning controls, roof types, flooring, furniture, lighting, ceilings, fire alarms, doors and hardware, windows, technology, parking lots, athletic fields/structures, playground equipment and landscaping, and the building envelope. Other issues to consider during an audit include accessibility (does a facility meet the requirements of the Americans with Disabilities Act, or ADA?), clean air, asbestos, fire, occupant safety, energy efficiency, susceptibility to vandalism, and instructional efficiency (e.g., alignment with state and local classroom standards).

(http://nces.ed.gov/pubs2003/maintenance/chapter3_2.asp#32)

Things We Already Know

- Buildings need to be reasonable to build cost wise.
- Buildings need to be reasonable to build time wise.
- Buildings need to fit the location in which they are built-aesthetically.
- Buildings need to be cost effective to operate over the life of the building.

Things We Already Know (continued)

- Buildings need to incorporate access for all students (ADA)
- Buildings should be environmentally friendly to build. (Green)
- Buildings should be environmentally friendly to operate.(Green)
- Buildings must anticipate community use.
- Buildings should be designed for enrollment growth or decline

Learning in the 21st century

21st Century Learning Needs

- Learning and innovation skills
  - Critical thinking
  - Communication
  - Collaboration
  - Creativity

21st Century Skills

- Life and career skills
- Information, media, and technology skills
- Core subjects – 3 Rs and 21st century themes

www.p21.org/our-work/p21-framework

Life and Career Skills

- Adapt to change
- Manage goals, time, & projects
- Work independently, positively, & ethically
- Be self-directed
- learners
- Interact effectively with others
- Work effectively in diverse teams

Life and Career Skills

- Produce & be accountable for results
- Multi-task
- Participate actively & professionally
- Collaborate & cooperate

Learning and Innovation Skills

- Think creatively
- Work creatively with others
- Implement innovations
- Reason effectively
- Use systems thinking
- Make judgments & decisions
- Solve problems
- Communicate clearly
- Collaborate with others

Information, Media, and Technology Skills

- Access & evaluate information
- Use and manage information
- Analyze media
- Create media products
- Apply technology effectively

Buildings should support Achievement

Buildings should be the envelope that supports the instructional program

- Rooms need to be large enough to accommodate the instructional strategies that are appropriate for the 21st century: collaboration, self-direction, knowledge acquisition
- Rooms need to be designed to allow flexibility in orientation and movement
- Rooms to be able to access the external environment and other spaces that support learning

Building design must anticipate the services for students with special needs

- special education
- English language learners
- gifted & talented

Building design must address the factors impact student learning outcomes

- Structural
  - Air Quality
  - Natural Lighting
  - Density/Space
  - Acoustics
- Cosmetic
  - Ease of cleaning
  - Color

Building design must be flexible to address future instructional trends

- Impact of Diversity

Building design must incorporate today's, and anticipate tomorrow's, technology

- Ability to connect to other classrooms in other places – global extension
- Ability to support home schoolers
- Ability to address short term, remote needs (snow days)

How the Building impacts Behavior

Building should be designed with controlled access

- A current building with 76 doors and entrances… Controlled?

Building designs should incorporate site lines for supervision

- Avoid potential hiding spots

Building design must address emergency communication systems

Building design should consider auto, bus, and pedestrian travel & safety

- Front access that looks like the front access
- Dedicated and separate access for buses and personal vehicles

Engaging the Community

Building design must incorporate features important to parents & community leaders

- Need to hear what they want

Building design must incorporate features important to teachers

- Need to hear what they want and help them move from today to the future in their considerations
- Need to have areas for collaboration and professional learning

Designers must know the budget within which they are working

- Need to know what you have to work with

Designers must know the level of support available from the community

- Need to know what the community is thinking

Designers must know if the community is able and willing to support construction

- Is funding available
- Is support available for bond vote

How does this fit into facility studies?

- Comprehensive approach that includes discussions with all stakeholders
  - Brings understanding
  - Brings commitment
  - Brings growth
- Study needs to be lead by 3rd party
  - Open communication
  - Increased sharing of “out of the box” thinking
  - Consideration of new ideas

- Current built space may seem to be adequate, but:
  - Does it meet instructional needs – size of classrooms, orientation of classrooms
  - Does it meet Behavioral needs – density, community,
  - Does it meet Safety needs - visibility, vehicular access
  - Does it meet Community needs – shared space, community pride


Questions?