#### **Recommended Classroom Standards**

While this document describes appropriate furniture, equipment, and space allocation, etc., the philosophy and motivation behind such standards for design envision classrooms as "learning environments" rather than boxes to put people (along with chairs, tables, and other equipment) in. Attention must be paid to a number of factors that will help to create or enhance the classroom as a place where the ability of instructors to teach and the opportunity for students to learn. The learning space:

- a. informs the learner of the intent of the learning to occur there.
- b. facilitates varied pedagogical approaches and instructional techniques.
- c. encourages individual, collaborative, and interactive learning.
- d. is flexible and agile, so that it can be re-configured quickly and easily.
- e. has comfortable seating with adequate work surfaces.
- f. has good sight lines.
- g. allows access for all individuals to participate inclusively and without discrimination.
- h. provides comfortable, durable, and stimulating surroundings.
- i. is interconnected in such a way that: (1) physical spaces connect with physical spaces, (2) digital spaces connect with digital spaces, and (3) physical spaces connect with digital spaces.
- j. Includes appropriate technology, whether provided by the university, by the students, or both.

## I. Capacity

- a. Classroom capacity should not be less than the following square footage per student:
  - i. 1-15=30 ft<sup>2</sup>
  - ii. 16-25=25 ft<sup>2</sup>
  - iii. 26-35=24 ft<sup>2</sup>
  - iv. 36-49=22 ft<sup>2</sup>
  - v. 50-75=20 ft<sup>2</sup>
  - vi. <76=16 ft<sup>2</sup>
- b. There should be no more chairs/tables in a room than its planned capacity.

# II. Configuration

- a. Square room preferred for maximum flexibility
- b. If rectangular:
  - i. No more than a 3:4 ratio.
  - ii. Wide/shallow (vs. long/deep) orientation
  - iii. Projection wall=widest wall (if room is not square)
- c. Classroom Instructor Teaching Center (CITC)
  - i. Centralized controls:
    - Video projector
    - Monitors (if applicable)
    - Lights
  - ii. Computer
  - iii. Sound System (e.g., speakers)
  - iv. Laptop connection capability
  - v. Camera:
    - Video capture
    - Document presentation
  - vi. See separate current standards document

#### III. Architecture

- a. Door(s) at back of classroom
- b. No dividers (solid walls to avoid sound bleed)
- c. Accent wall (if applicable) visible from hallway

#### IV. Windows

- a. Natural lighting preferred
- b. Provide window covering
- c. If possible, additional windows (above writing surfaces) to allow natural lighting

### V. Lighting

- a. LED lights:
  - i. Occupancy sensor
  - ii. Dimmable
- b. Separate zones for projection areas
- c. Controls located in close proximity to instructor's teaching space

### VI. Sound

- a. Speakers placed to minimize bleed to adjoining rooms.
- b. Acoustical requirements:
  - i. When classrooms are located near functions that generate significant noise levels, higher STC ratings and special wall-construction details must be included for all interior walls, elevated slabs, floors and exterior walls (including doors and windows).
  - ii. Provide for sound attenuation to contain noise generated from adjacent locations and from both above and below the classroom location.
  - iii. The review of acoustical requirements for classrooms by an acoustical consultant is recommended.
    - Minimum NC ratings: 0-59 seats: NC30-35 or less; 60 to 149 seats: NC 25-30 or less; 150+ seats: NC20-25 or less.
    - Walls in classrooms should have a minimum sound transmission class (STC) of 50.
    - Individual equipment such as fans, ductwork and diffusers shall have ratings not exceeding NC 25 throughout the load range.

### VII. Projection & Writing Surfaces

- a. Projection screen on teaching wall; a whiteboard can be mounted behind the screen if there is adequate whiteboard space elsewhere in the room (i.e., if the condition of VIIb is met).
- b. White boards (or white board paint) on all walls.
- c. Whiteboards should be as long as possible to create maximum writing surface.
- d. Heights and features: eraser tray 36 inches above floor, tackboard on top, recycling bags for markers, hooks from which to hang recycling bags).

VIII. Power: Floor level electrical outlets (as in BU library St. Paul)

# IX. Networking

- a. Wireless connectivity for personal devices
- b. Wireless connectivity to projector
- c. Wired connection to CITC
- d. Wired connection to displays
- e. Build room with floating floor to allow for easier retrofitting (if a high-tech classroom)

#### X. Furniture

- a. Tables:
  - i. Appropriate for learners of all ages
  - ii. Flexible for all teaching styles: wheels for mobility recommended
  - iii. Dimensions: 24 x 54
  - iv. Features:
    - Wheels
    - Wired
- b. Chairs:
  - i. Wheels
  - ii. Standard colors

# XI. ADA Requirements: Check with Kara Fifiels?

- a. Sound amplification
- b. Adequate capacity for wheel chairs in room, including space and appropriate furniture

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