

Design an Effective
TRAINING SPACE



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White Paper

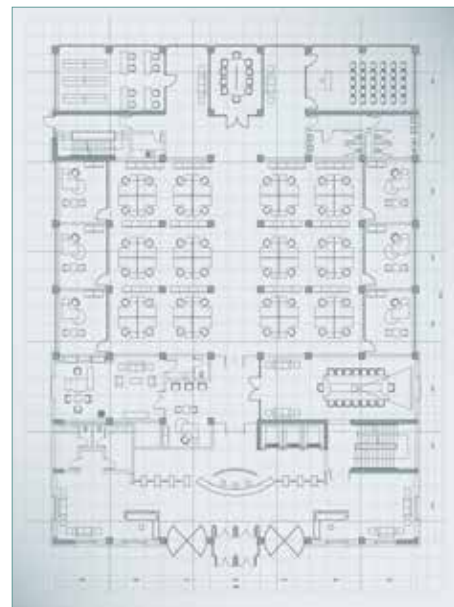
Design an Effective TRAINING SPACE

Training rooms are environments where people meet, learn, share ideas and collaborate. Since they are intended to accommodate such a wide range of activities, these rooms must be designed and outfitted with one word in mind: flexibility. Here are the fundamentals of creating a flexible and effective training room space.



1 GET PHYSICAL

The best place to start is with the room itself. For example, wide doors assist in moving training materials in and out of the space, and a supply closet outfitted with basic office supplies saves trainers valuable time. Other key considerations are room size, HVAC and ventilation requirements, ADA, wall space, and ancillary space.



SIZE MATTERS: A training room that is intended for different types of training must consider size. “One way to estimate the adequacy of a room is to calculate the square feet needed for each participant,” says Dugan Laird in *Approaches to Training and Development, Third Edition*. “Classroom set-ups ... require from 15 to 17 square feet per participant.

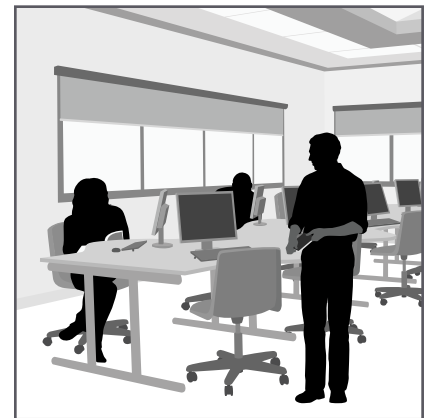


“There is actually greater risk in getting a room too big than too small,” Laird continues. “If a room is a bit small, participants may trip over each other a little bit, but the learning still occurs effectively. If the room is too big or the ceiling too high, learning may be inhibited because little interaction occurs.”

Laird also indicates that ceiling height is important. Anything below 10 feet may pose problems for instructors using visual aids. Screen height should enable learners in the rear of the class to see above (not around) the heads of the people in front of them.

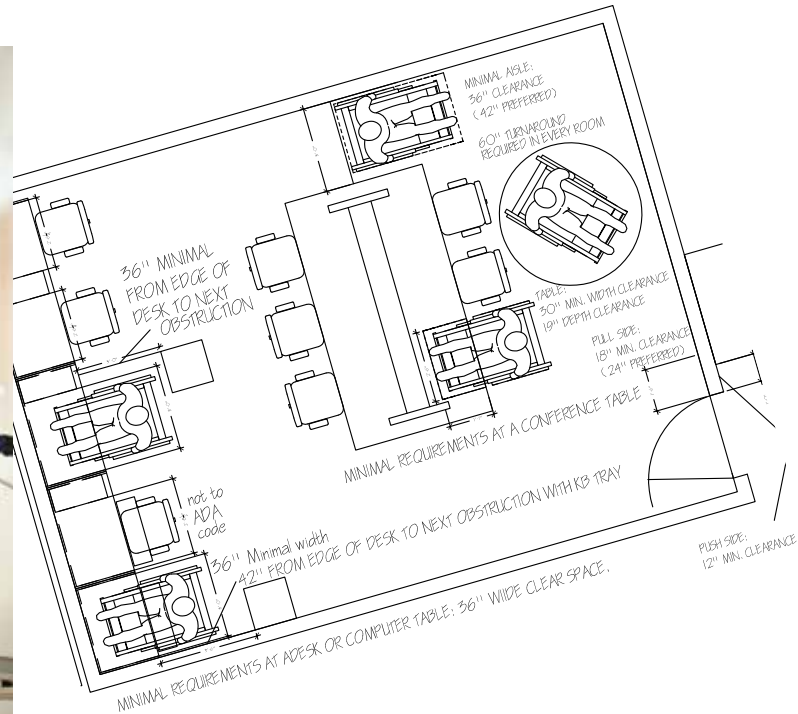
HVAC AND VENTILATION REQUIREMENTS: Training room HVAC and ventilation requirements are straightforward: Place the controls inside the room and make them simple to use. When running, the system itself must be quiet so that conversational speech can be easily heard.

“Experienced instructors will tell you that ventilation is a ‘lose-lose’ situation,” says Laird. “You can’t please all the people any of the time — or any of the people for more than about 15 minutes at a time. It is better to keep the room a little cooler so the students do not get drowsy. Laird also recommends a minimum air velocity of from 12 to 15 feet per minute.



Classrooms require from 15 to 17 square feet per participant and a minimum of 10 foot ceilings.

ADA: “One of the great things about designing an environment that encourages collaborative learning,” says Lisa Adams, NCIDQ, LEED AP ID+C, Vice President of Chicago-based HKS Architects, Inc., “is that a flexible space is more friendly to wheelchair movement because you’re using smaller tables that can be formatted to accommodate both lesson plans and wheelchairs.” In addition, such an environment provides space for guide dogs, assistants and equipment (such as recording devices), even if the room is set up for one style of learning one day and another style of learning the next. Of course, the space should be designed to meet specific ADA guidelines, such as accessible doors, hardware and signage.



WALL SPACE: Capitalizing on wall space is an easy and obvious way to gain flexibility in the training room. Carla Remenschneider, IIDA, RID, interior department coordinator/senior associate with Indianapolis-based Fanning Howey explains: “For example, there are vinyl and paint wall coverings that can be written and projected on.” Another option is a two inch rail system which supports whiteboards that can be taken off the walls, written on at students’ tables and then rehung on the rails for the entire class to see.

ANCILLARY AREAS: Regarding ancillary space, there are a number of things to consider. First, restrooms and closet/storage space should be nearby, although it’s even better if closet/storage space is inside the training room. Next, food service should be close. Third, break-out areas outfitted with different types of furniture are ideal for small group work. This might include a spacious hallway with seating or an outdoor patio. “There is a greater understanding that learning doesn’t stop inside the classroom and a secondary, more informal, support environment is needed to digest information and communicate with peers about it,” Adams says. Finally, commons areas (also known as collection points) should be proximate but not directly adjacent to the training room so that their hustle and bustle isn’t distracting to those inside the room.



2 FLOORING

For improved acoustics and to muffle noise when students move their chairs and feet, choose low-pile commercial carpeting. Look for a pattern that will remain stylish until you plan to renovate the room (approximately 10 years) and will not highlight the inevitable spills of everyday use.

3 LIGHTING

“There are both inexpensive and expensive ways of accomplishing lighting,” says Melissa Dicaire, RID, LEED AP ID+C, associate principal and senior interior project designer for Chicago-based Perkins + Will. At the minimum, she advocates for the ability to easily preprogram or dim the lights as required.

Also, because the training room is flexible, lighting should be designed for even illumination. “And specify ambient light rather than direct down light,” says Adams, “because, as technology is having us do more virtual meetings, ambient light fills in shadows on faces so people look well on screen. It also eliminates glare on screen surfaces.”

Finally, if the training room has windows providing natural light, outfit them with easily adjusted shades or drapes to reduce glare.



Carpet tiles are often desirable as they can be easily replaced if damaged.

4 TECHNOLOGY

When it comes to technology, the training room must have it all: white board, ceiling-mounted projector with remote, large-format screen, DVD player, speakers, wireless microphone, laser pointer and a lectern (from which all the technology is easily managed with the help of a telephone and laminated guides). All this technology offers trainers flexibility in terms of lesson delivery, such as allowing for video sharing from a host server; screen sharing, which allows for real-time, interactive collaboration; displaying Websites whose content enhances the lesson at hand; and reviewing previous lessons, whose content was saved in a number of ways.

A high demand on technology has increased the need to have power access to recharge laptop computers. To accomplish this, training rooms are being designed with additional outlets, in the floors, the walls, and the work surfaces.

“A room that is 20 ft. by 30 ft. may have four to six floor boxes laid out on a grid,” says Remenschneider. Tables are strategically placed near the floor boxes and are equipped with flip-top boxes on the surfaces, which are attached to cords that run down the legs and plug into the floor boxes. This allows easy charging and eliminates cords in walkways, which create trip hazards. In addition, she sees a 25 percent increase in wall boxes at counter-top height for charging without bending. “Instead of two on a wall, there are three,” she says, “and instead of every 10 feet, they’re placed every eight feet.”



5 TABLES AND CHAIRS

Tables and chairs impact how a space is used. For flexibility, they must have the ability to move quickly and easily, both to create a different layout and for storage.

“The tables themselves are really important because they are used all the time,” says Dicaire. “We recommend high-quality tables that hold up to abuse.” Specifically, they should be lightweight and have the ability to fold or nest to save space. Folding or nesting must be accomplished via user-friendly mechanisms; the use of tools is not an option because it reduces the speed at which the space can be changed. Evaluate, too, if tables require plug and play, daisy chain power, vertical wire management, modesty panels, privacy panels or casters.

Regarding table size, Adams notes that there is a sweet spot. She looks for the smallest footprint that provides the best density and adaptability. That’s usually a 60-inch table with a C-shaped leg for knee room. When it comes to width, she often specifies 24 inches, and has sometimes specified 18 inches. “We want it to be just deep enough for a laptop and a space for students’ materials,” she says.

Laird has advice for chairs: “Participants’ chairs should receive

careful consideration. Parts that contact the user (seat and frame) should be constructed of material that does not conduct heat or cold." In addition, because some training requires all-day sessions, purchase chairs that are ergonomically designed for superior comfort. Consider padding, pneumatic seat height adjustment and swivel capability.

What constitutes a comfortable chair? "Not a folding chair," quips Lisa Sauer, FPC, a senior training consultant with Minneapolis-based Ceridian.

A less formal style, which better facilitates free-and-easy communication between participants and between participants and the instructor, is a round configuration. Tables joined together to form a solid circular unit encourage conversation, says Laird, and tables joined together forming a circular unit with a hole in the middle create a situation where some people don't speak at all and those who do tend to speak for longer periods.

Round, U-shapes and arcs are ideal for promoting the



6 ROOM CONFIGURATIONS

A discussion of flexible training rooms wouldn't be complete without including room configurations. There are many from which to choose and, in *Approaches to Training and Development*, Laird analyzes them according to their facilitation of two-way communication.

Two common styles, both of which are formal and limit two-way communication, are classroom and auditorium. Sauer prefers the classroom-style configuration precisely because it preserves the classroom atmosphere. She opts for a middle aisle to reach students in the back. Dicaire explains that the rows should be spaced no less than 42 inches apart and no more than three tables in a row for easy egress. For auditorium-style seating, rows of chairs are set up to accommodate town-hall meetings and/or video presentations.

Socratic teaching method, which emphasizes student/teacher dialog. Smaller configurations, six sets of five, for example, are also ideal for the collaborative learning method and even the problem-solving teaching method, which is where trainers provide structured problems for students to solve collaboratively and the trainer interacts with each group as it solves its problems. This configuration facilitates peer to peer teaching which is increasingly recognized as a vital learning tool for both the student 'teacher' and the student 'learner.' What's great about training rooms designed for flexibility is that they can accommodate these common teaching styles, plus others, quickly and easily.

When it comes to training room design, Sauer observes that a good trainer can overcome any obstacle in a room's set up if he or she has a welcoming attitude, engages learners and develops relationships. She also acknowledges, however, that a well-designed, flexible space helps her be a better trainer. ■

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