

at home and elsewhere, not just at school. 1:1 can be implemented through either school-provided devices or BYOD, “bring your own device.”

3:1: Digital infrastructure needed for 1:1 programs. Many people, mostly adults in the school for the moment, use multiple devices: smart phone, tablet and laptop. When in the wireless mode, they are all trying to connect to the network at the same time, putting an even bigger strain on often inadequate wireless systems. So when we are discussing developing 1:1 programs for schools, the wireless infrastructure needs to be far more robust (larger bandwidth) to accommodate even more devices in the future.

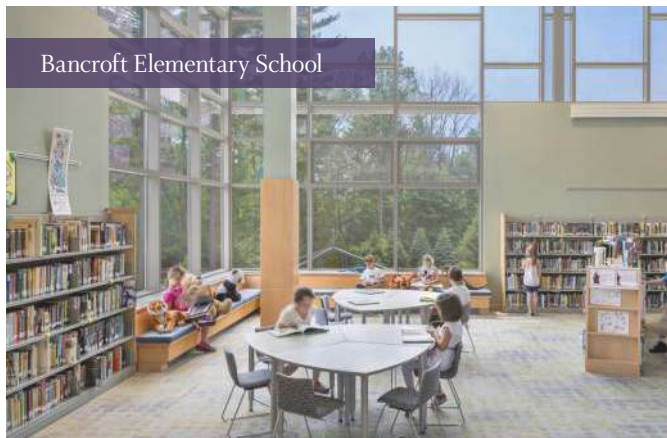
21st century skills: as defined by “The Partnership for 21st Century Skills,” is made up of the 4 Cs: Communication, Collaboration, Creativity, and Critical Thinking/Problem Solving. <http://www.p21.org/>

For those of you who want to understand educational terms well beyond those related to school planning and design, consult the following:

Ed Speak: A Glossary of Educational Terms, Phrases, Buzzwords, and Jargon, Diane Ravitch, ASCD, 2007

(In some cases, this book was referred to when developing definitions as they relate to planning and design.)

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Glossary of Terms

For School Planning & Design

This glossary is intended for individuals associated with or interested in the planning and design of school facilities (School Committees, politicians, the interested public) who may not be familiar with terms currently used by educators, educational planners and architects. Definitions are kept short. For some terms, you may choose to obtain deeper definitions or examples.

A

Active learning (vs. passive learning): any situation in which students are participatory and involved, often by making, doing, role playing, discussing, debating, etc., vs. just listening to the teacher.

Advisory: typically in middle schools and high schools—a period of a day (often a short period) during which all students meet in small groups with an adult (teachers, para-professionals, administrators, etc.) to discuss almost anything that students have concerns about. It is often seen as a good way of making adult/student connections and improving communications.

Alternative school: often a program within a school that is substantially separate from the general population. Typically serves students with social/emotional issues who have difficulty fitting in to traditional school environments. Depending on the needs of the school community, can serve other populations such as gifted and talented, kids at risk, dropouts, other...

At-Risk Students: often students who are not engaged or interested in school and are at risk of dropping out. This can range from high achievers who are bored to low achievers uninterested in school because it does not teach in a way they can learn or it is disconnected from their lives.

B

Blended learning: a program in which content delivery is a combination of online and face-to-face school based learning. Students have some control of time, place and pace of learning.

BYOD – bring your own device: a school policy in which students are expected to provide their own laptop or tablet for in-school (and home) use. The school typically includes a supplemental program of providing devices to students whose families do not have the financial resources to provide their own. Some schools see this as inequitable since students of means with higher-end devices may have an advantage over other students. It can present network security issues as well, though many schools have overcome them. School-supplied IT and network support is essential, as is teacher professional development in device usage and instruction.

C

Classroom: the basic instructional space within schools.

Class size: Typically a target number for the maximum number of students in a given class type or subject area. Sometimes set by the school committee or district administration, sometimes set by union contracts. Often

varies by grade level; sometimes varies by ability levels, e.g. high-achieving students may have larger class sizes because that might have little effect on their performance, whereas by contrast a lower achieving student may benefit greatly from a smaller class size.

Cluster plan: classrooms organized with close adjacencies, often around a large-group instruction space, project room or other focal space. This is in contrast to a double loaded corridor. In middle schools, a cluster often houses a “team” (teachers who share the same group of students). In high schools, they can house an academic department, a house or a school within a school; often defines a small learning community.

Constructivist learning: a philosophy originally developed by John Dewey based on hands-on activities, inquiry, exploration and discussion. Direct instruction by teachers is minimized.

Core academics: English, social studies, math, science, foreign language curricula, sometimes the arts are included.

Critical thinking: the trained ability to think clearly and dispassionately. Critical thinking is logical thinking based on sound evidence, involving the ability to gather and analyze information and solve problems. (D. Ravitch)

D

DESE - (Massachusetts) Department of Elementary and Secondary Education: current name for the Department of Education. <http://www.doe.mass.edu/>

Differentiated Instruction: instruction intended to match the delivery method and experiences with individuals’ different ways of learning.

Double-Loaded Corridor: a traditional classroom plan in which rows of classrooms flank both sides of a corridor; also referred to as an egg-crate design.

E

Early childhood: grade grouping that starts with Pre-K and kindergarten, often includes grade one and sometimes additional early grades.

ESL: English as a Second Language, programs for students who do not have fluency in English.



ELL: English Language Learner - a student in an ESL program whose native language is not English and who lacks enough proficiency in English to be mainstreamed for part of the school day.

English language arts: English curriculum.

Ergonomic Furniture: typically lightweight, easy-to-move and more comfortable than the traditional hard plastic or wood furniture. It recognizes that individuals learn better when they are comfortable.

F
Flipped classroom: a delivery process in which the curriculum content, such as lecture, video, reading or other, is provided to the student to experience outside the classroom (homework). Class time is then used for discussion with and among the students, group projects and other application of content knowledge. A component of active learning.

FTE (full time equivalent): A 1.0 FTE is a full-time teacher or student, while an FTE of 0.5 indicates that a teacher or student is half-time. Two half-time teachers equal 1.0 FTE.

G
Grade Configuration: the arrangement of grades that make up a school; can vary significantly among communities; most often set around pedagogy but occasionally set around available facilities.”

H
house (plan): a grouping of spaces: classroom, administrative, support, etc. developed around an identity or theme; can be a school within a school.

I
Immersion (full): an instructional approach combining written, musical and visual arts and culture to a subject, often referred to in foreign languages.

Inclusion: special education students integrated into typical general education classrooms. The term is also used for ELL students integrated into typical general education classrooms.

Interdisciplinary learning: an approach of multiple core subjects being taught in an integrated way, often on a subject or theme and often around a project.

Intervention: most often a specialist who joins a general education classroom to assist student(s) in need of assistance rather the “pulling them out” for that assistance.

L
Large group instruction (space): a larger, unassigned space used for a variety of activities such as: multiple classes that meet together; for guest lecturers; for project work, gallery space, large meetings (student or community), etc.

Learning Commons: educational space often adjacent to classrooms used for a variety of activities such as PBL, small or large group work, tutoring, collaboration, meetings and other activities that are difficult to conduct in a classroom.

Learning Stair: an often-large stair that incorporates seating for both formal and informal gathering, teaching, socializing, often in an amphitheater type configuration.

Learning Style: Modes of learning that reflect individuals’ natural and sometimes trained traits such as: visual, verbal, tactile, kinesthetic, or auditory.

Lifelong learning: just what it says—a belief that with the correct approach in school, people will remain engaged and excited about learning throughout their lives.

Life skills program: programs for students with severely restricted cognitive development. Programs vary from school to school but in high schools the spaces needed often include a training kitchen; apartment-like area with a bed; adult-assist toilet room with shower and changing table, and a variety of small group teaching environments, including technology. While often present at all grade levels, high schools typically include the most developed programs. Space requirements are in the range of 1,200–1,500 sf for a class size of 8–12 students.

looping: students remain with a teacher for multiple years rather than changing teachers every year.

M
Mainstreaming: special education students placed in general education classrooms; may be done for some or all classes based on the students’ disabilities; also referred to as inclusion.

Maker spaces: a relatively new term for a hands-on space, often with age-appropriate tools to create, prototype, and test ideas and projects.

Mastery learning: instruction methods in which students advance their studies based on their knowledge of the subject rather than seat time or age.

Modality: a means by which learning occurs, as, for example, through visual or kinesthetic experience. Also see learning style. (D. Ravitch)

MSBA – Massachusetts School Building Authority: created in 2004 to replace the former school building assistance program administered by the Department of



Education, The Massachusetts School Building Authority (“MSBA”) is a quasi-independent government authority created to reform the process of funding capital improvement projects in the Commonwealth’s public schools. The MSBA strives to work with local communities to create affordable, sustainable, and energy-efficient schools across Massachusetts. <http://massschoolbuildings.org/>

P
Paraprofessional: a trained aide who assists the classroom teacher, often in special education classrooms or regular ed classrooms that mainstream special education students. The “para” often does not have the same credentials and training as regular classroom teachers. (D. Ravitch)

Pedagogy: the study of education and education practice. Also, a philosophy about the best way to teach. (D. Ravitch)

Peer-to-peer learning: students learning from each other.

Pod plan: see cluster plan.

Portable classrooms: prefabricated building components that comprise classrooms and often wings used to accommodate overcrowding; also used as swing space to temporarily house classes during renovation projects.

Project-based learning: this learning modality meets curriculum content goals by asking students to address deep, open-ended situations, such as solving problems or inventing things. It is naturally inclined to interdisciplinary learning and student collaboration, both highly valued 21st Century learning skills.

Pull out (pull over): removal of a special education from the classroom to a separate room or space for remedial or targeted instruction.

R
Resource room: special education space intended for small group instruction and/or tutoring or remedial work; also referred to as a learning lab.

S
School within a school: most often incorporated in very large high schools to break down the size of the school into multiple schools within the same building or campus, often with separate administrations and facilities; can be designed around academic specialties or social houses or other ways to create smaller learning communities.

Sections: the number of classes needed to fulfill a curriculum offering.

Service learning: programs in which students engage in real-world and socially relevant community activities in ways structured to enable them to attain specified academic learning objectives.

SIFE (Students with Interrupted Formal Education): typically foreign refugees who have gaps of 2 or more years of education in their native country.

Small Group instruction (space): small teaching space (often anywhere between 80–200 sf) intended for individual or small group learning or activity; meant for a variety of uses including: individual or peer-to-peer learning, accommodation of individualized learning styles, special education or regular education.



Social-emotional: an area of special education for students with disabilities related to cooperating with others or establishing relationships within a classroom or school community.

SPED: programs of special education.

Stand-up desks: student desk used by standing or sitting on a high stool, to facilitate a student’s kinesthetic or physiological needs to move and, in doing so, helping the student to focus on tasks at hand.

STEM: the integration of Science, Technology, Engineering, and Math in an applied and interconnected way.

STEAM: the integration of the arts (design and visual and performing arts) into a STEM curriculum.

Student-centered (classroom): also referred to as learner-centered (vs. teacher-centered).

T
Title I: a federally funded program begun in 1965, providing funds for programs intended to improve academic improvement of low income children.

Title IX: federal legislation passed in 1972 that prohibits discrimination based on gender; most often associated with equal sports facilities for girls and boys, pertaining to quantity of space, programs and spending.

V
Visioning: an often community-based effort of assembling stakeholders (including educators, teacher and administrators, students, parents, and community members) for the purpose of exploring, in a workshop format, how the school or school district might develop long-term direction for educational delivery and the facilities needed to support this delivery.

#
1:1: a smart device for each student in the school. This could be a tablet, laptop or one of the many devices that are in between, such as a Chrome Book. Smart phones are not typically included in this category since serious research and writing is almost impossible using them. For 1:1 programs to be effective, students need to be able to use the devices