



GETTING THE MOST OUT OF YOUR CLASSROOM SPACE.

It's reassuring and not very surprising to know that the driving force behind the 21st Century Classroom isn't a passing fad, a change of fashion or boredom with the status quo. Rather, prime mover behind the composition and layout of the 21st Century Classroom is none other than 21st Century Learning, characterized by collaborative learning.

Collaborative learning has been discussed and studied by academicians since the early 20th Century and its many strengths are well documented. That it's only now taking hold in classrooms may have more to do with the fact that it demands a 180° change in the orientation of the teaching/learning roles, and less to do with its

effectiveness, which has been repeatedly demonstrated. Study after study has shown that it is far a far superior way for students to learn non-foundational knowledge – a higher level of knowledge that's acquired by applying critical thinking and logic, not simply recalling facts. To oversimplify, the two core concepts of collaborative learning are that it is:

- Student-centered learning, that empowers the students and makes them active participants in the learning process
- Based on solving open-ended problems or creating some sort of a "product" which could be anything from a report, a poster or a video

The 21st Century Classroom

HOW CAN A CLASSROOM ENVIRONMENT ENCOURAGE THE FREE-FLOWING EXCHANGE OF THOUGHTS, IDEAS AND INFORMATION?

Classroom layout is the fundamental step in establishing a learning environment. In a collaborative learning environment, the classroom layout must accommodate actions of students and teacher:

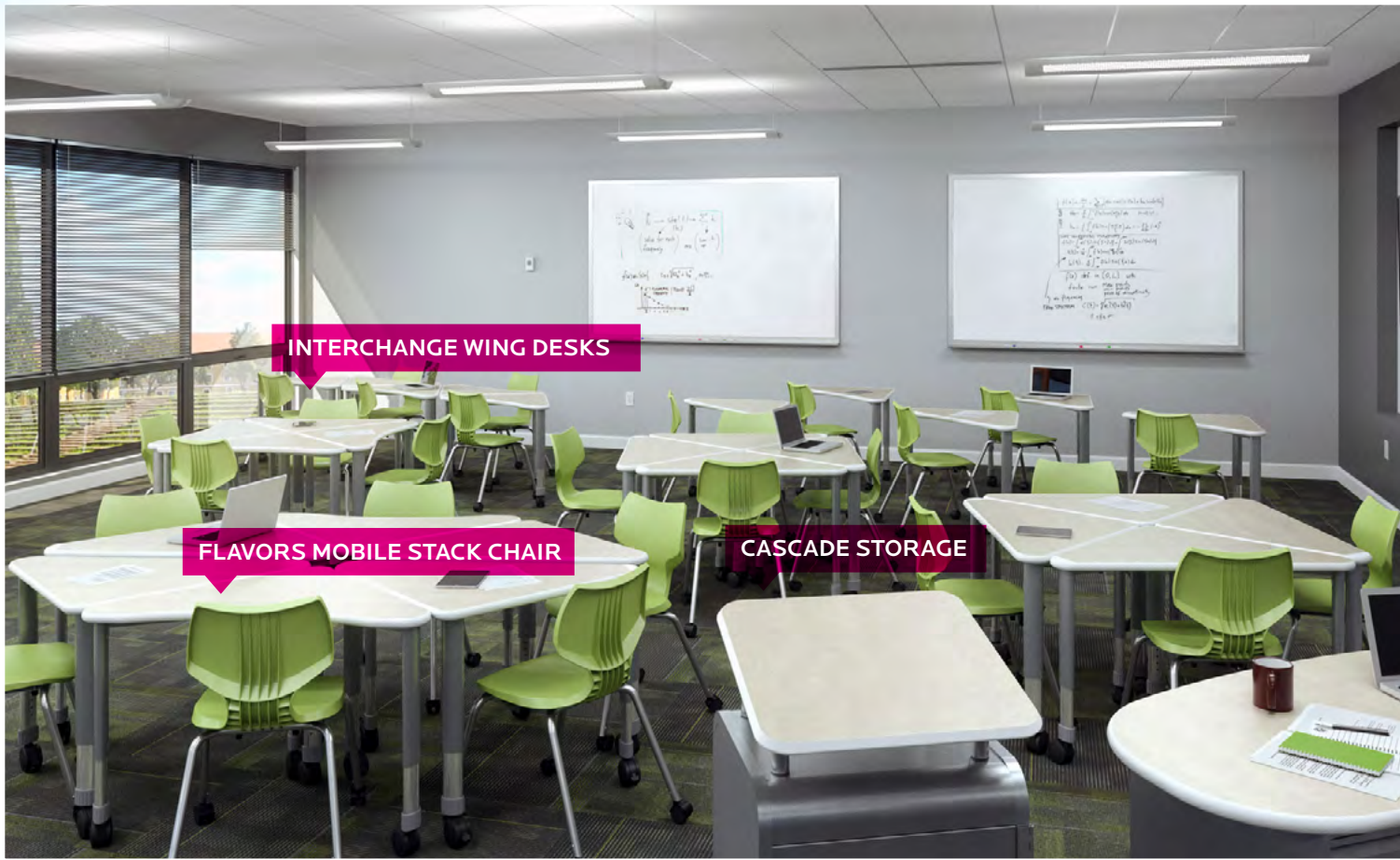


1. **CLUSTERS** (or pods) of desks to accommodate small group work for two to six students. Pods allow students to interact and establish eye contact
2. **UNIMPEDED ACCESS** to all parts of the room for the teacher. In a collaborative learning classroom, the teacher is not fixed at the front of the room, and needs to move easily from group to group to facilitate discussions and provide information
3. **LEARNING ZONES** In a collaborative learning classroom, different groups may need to access different learning tools, like computers or white boards. Students may also need to work alone on certain aspects of their project, so zones for these modalities need to be established in the classroom
4. **MOVEMENT** A big advantage of collaborative learning is that it permits movement. It has been demonstrated that students moving from one area to another as they acquire new information helps them to learn and retain more.
5. **SPACE CONSTRAINTS** Putting more students into classrooms means desk clusters must be compact to allow needed movement within the classroom.

IS SPECIAL FURNITURE NEEDED TO MEET THE NEEDS OF A 21ST CENTURY CLASSROOM?

If, by “special” you mean anything other than restricting combo desks, the answer is yes. Old-school desks are ill suited to mobility and grouping. And, don’t even get us started on the seating. Choose from the many choices of collaborative learning desks from the Smith System portfolio. These desks are designed for maximum flexibility in the classroom. They can be clustered for group work, or separated for individual work. Owing to the angled desktops, they can be gathered in very compact groups, which allow movement within the classroom.

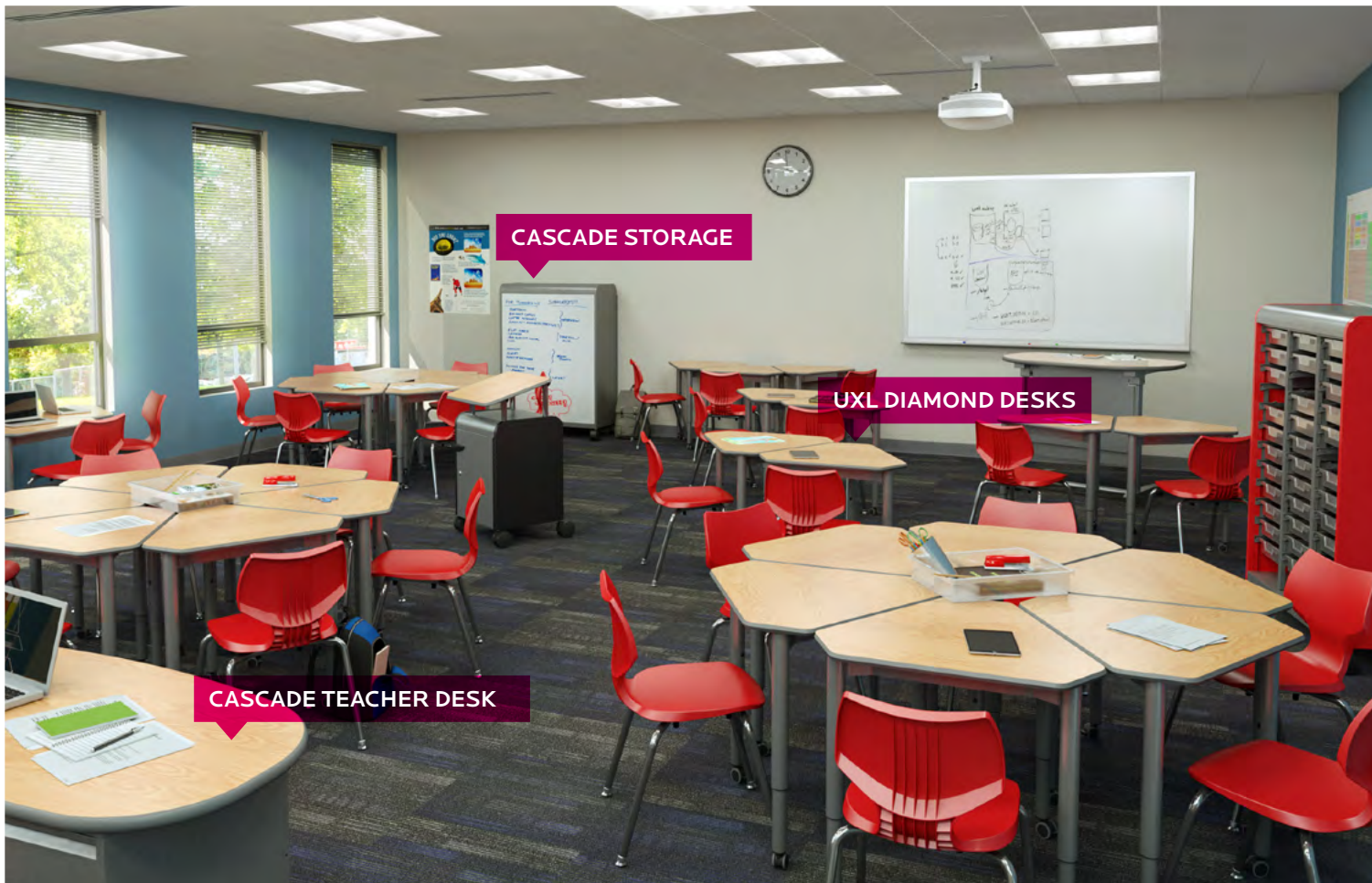
Note: “Collaborative” defines the intended use of a student desk, not the shape. Rectangular student desks remain a practical option.



INTERCHANGE WING DESKS

FLAVORS MOBILE STACK CHAIR

CASCADE STORAGE



CASCADE STORAGE

UXL DIAMOND DESKS

CASCADE TEACHER DESK

Deconstructing the student desk.

Manufacturing processes have come a long way in the last 30 years in the school furniture industry. So, what's a school district to look for to make sure they're getting a student desktop that will last many years? Student desktops consist of four seemingly basic things. Each component has to live up to the very specific demands of the learning environment.

There are two main laminate products used in the school furniture industry; High Pressure Laminates (HPL) and Melamine.

High Pressure Laminates are created using significant heat and pressure to adhere core substrates together, creating a more durable and quality work surface.

"Is this melamine or HPL?" Melamine is a product created at low temperature and pressure. It does not contain a kraft paper core and is thus less resistant to impact damage and wear. Melamine is typically used in a low traffic/wear application (partitions or shelving units).

We use only High Pressure Laminates in our products.

Next, all edges are not created equal. Smith System edge banding is inserted into a groove in the particle board around the edge of a student desk. This is where the term "T-mold" comes from. Our T-mold

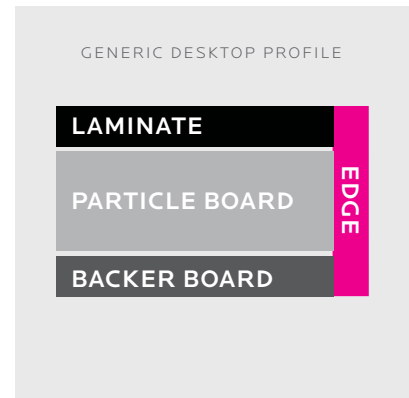
edges are stapled into place every 6-8 in. and we use 4mm and 3/8 in. bumper edges.

A non-adhered 1/8 in. edge band will not hold up to today's demanding classrooms. *"How is the edge band affixed to the desktop?"* Some desks

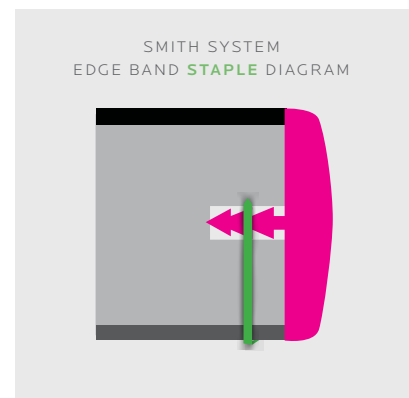
made from hard plastic do not have edge banding. It is needed on Collaborative Desks because they move and they bump into each other many times each day by design. Hard plastic tops chip due to this constant abuse, a T-mold edge stands up to it.

Last, the substrate used to create the collaborative desktops is of utmost importance. We use 45 lb. density particle board from regions of the United States that meet strict California Air Resource Board specifications (CARB2). Our entire line is UL Greenguard Gold certified.

What environmental certifications does the furniture carry?



For the most part, student desktops are made the same way, it is the materials that create a lasting piece of furniture. Ask questions about how the top is constructed. A quality manufacturer of school furniture will know their stuff!



EDGE BAND STAPLED INTO PLACE?

Make sure the edge band on your student desk or table is stapled into place. Without staples, or some way of attaching the edge to the desktop, students can pull the edge band out very easily. Our desks and tables have edge band that is stapled every 6-8 inches.

CONSIDER ITS WARRANTY.

When choosing new furnishings for your educational environment, check the warranty. Many manufacturers offer a one year limited warranty. Because we know our product will stand up to today's classroom, we offer a lifetime warranty on frame and legs and a 12 year warranty on tables and desk tops. A school district that invests in quality, should expect a warranty that reflects confidence in the product line from the manufacturer.

Collaborative desks must fit the students, too.

While collaborative desks offer great versatility when it comes to arranging them, they must also be sized appropriately for the grade level of the student and offer adjustability to accommodate taller and shorter students. The following chart shows the appropriately sized desk for different grade levels.

SUGGESTED DESK AND CHAIR HEIGHTS:



| TABLE HEIGHT | ~19" | ~22" | ~24" | ~27" | ~29" |
|---------------|------|------|------|------|------|
| CHAIR HEIGHT | 10" | 12" | 14" | 16" | 18" |
| 3-4 year olds | 50% | 50% | | | |
| Kindergarten | | 50% | 50% | | |
| Grade 1 | | | 100% | | |
| Grade 2 | | | 25% | 75% | |
| Grade 3 - 4 | | | | 100% | |
| Grade 5 | | | | 50% | 50% |
| Grade 6 - 12 | | | | | 100% |

Shape, mobility, construction and fit all matter.

Collaborative Learning desks are subject to more movement and stress than desks designed for traditional learning situations. Therefore, take care to inspect the desk's construction.

- Does it offer structural framing or Easy On Brackets? Choose structural framing because EOB leg sets will not stand up to the collaborative classroom.
- Can the desk be made mobile, allowing a young student to move it? Casters are needed.
- Will the desktop withstand the use and movement? Insist on a High Pressure Laminate and Edge Band that's securely in place.
- Is the shape appropriate? When arranged in a pod, do the desks allow direct eye contact with the other students in the group? Does the pod's total footprint work for the size of the classroom?
- Is it the right size for the student? Can it be adjusted to accommodate a student in this grade range?

DOWNLOAD THE FULL BUYING GUIDE:
smithsystem.com/collaborative-desks

TALK TO AN EXPERT ABOUT COLLABORATIVE LEARNING DESKS.

Our innovative school furniture is sold through a national dealer network. Please contact us for a dealer recommendation in your area.

Call: 800.328.1061.

Email: furniture@smithsystem.com

A FEW OF OUR OPTIONS TO CONSIDER:

[VIEW MORE OPTIONS: SMITHSYSTEM.COM/21CENTURYCLASSROOM](http://SMITHSYSTEM.COM/21CENTURYCLASSROOM)



**INTERCHANGE™
WING DESKS**



**CASCADE™
TEACHER DESKS**



**INTERCHANGE™
MULTIMEDIA TABLE**



**UXL™
DIAMOND DESKS**



**UXL™
POWER BAR™
POWER UP FOYERS
OPEN SPACES**



**UXL™ NEST & FOLD
TABLES AND CHAIRS**



**FLEXLINE™
ARC - 8**



**CHAT™ CHAIRS
WITH POWER**



**CASCADE™
MOBILE STORAGE**
SMITHSYSTEM.COM/CASCADE-STORAGE