medialab

WHAT WE OBSERVED

Gen Y and millennials love technology. And while the trend of more laptops on campus is real, only about one-third of students use laptops in the classroom. Why? Too little desk space, no power access, too much to carry around and instructors' restrictions on use in class.

Computer labs are still a draw because students can access expensive, specialized software and printing is often at reduced costs or free.

These labs are morphing into media labs where sophisticated software is necessary. They must accommodate individual, dyadic and team work.

In addition to new media labs, many schools are creating small computer pods and placing them in media labs, libraries and other buildings throughout the campus.

Spaces for Technology + Users

Ever since desktop computers first arrived on campuses in the 1980s, schools and colleges have built dedicated computer spaces for students. Today, not only do students at every level have access to laptops, tablets and smart phones, they are using them in all learning spaces, including at home. The proliferation of technology and blended learning is changing the expectations of learning in the media lab.

Digital Media Labs

Students are drawn to digital media labs for several reasons. College computers have program-specific software that's often too expensive for students to buy for their own computers, and media labs provide students access to scanners, multimedia workstations, and other technology, Schools also offer quality printing provided by school equipment other materials.

Other reasons to go to the lab? They're convenient to classrooms and the library, students need to access heavy duty computing power (e.g., to run engineering rendering software), project files are stored on the school database (e.g., large video files, art projects, etc.), and students don't always carry their laptops around because they're too heavy or cumbersome.

With the rise in virtual desktops and 1:1 initiatives, some schools are finding less need for the traditional computer lab. In its place are collaborative areas and zones for self-directed learning. Institutions can support this higher-level learning by providing labs that are planned as true learning spaces, not simply hardware locations.

Media Lab as Classroom

Students and instructors are participating in more online forums, viewing more online lessons and even creating their own digital content, resulting in more efficient access to education than ever. Yet all students need and seek face time with instructors and other students; learning depends on it. Steelcase's recent primary and secondary research suggests blended learning supports richer face-to-face interactions and higher-level cognitive thinking.

As blended learning becomes the new standard, instructors are increasingly using technology to offer more personalized, self-directed experiences for students. While students learn online in the lab, the instructor assumes a more dynamic role of the guide-on-the-side, helping students with problem solving, communication and collaboration.

Media labs have typically been enclosed, with rows of small side-by-side desks that can accommodate a computer and little else. This approach simplifies furniture specification, layout, wiring and cabling but does little for the students who use the labs. They have to work in close quarters with little privacy for what's on their screens (a commonly articulated annoyance) and little if any worksurface for notebooks, books and other materials

To make these spaces more effective, plan for varied learning modes, such as individual focus work, peer-to-peer learning, group work and guide-on-the-side instruction. Design should also consider how users can be more active during computer work to improve their comfort and overall wellbeing.

Today's media labs should be designed to allow educators to leverage technology in entirely new ways and the flexibility to support the ongoing evolution of learning.

GO DEEPER

For more on Steelcase's research and insights on the impact of technology on learning spaces, see the white paper, Technology-Empowered Learning: Six Spatial Insights, available on SteelcaseEducation.com





The Node chair with five-star base straddles table bases and rolls easily under and around a variety of tables and table heights, making it easy to pair with existing worksurfaces. The five-star chair is height-adjustable and utilizes the Node seat shell, which was designed to provide comfort without upholstery for durability and ease of cleaning.

Tips for Media Labs

Media labs are not just places to warehouse computer equipment, they're workplaces for students, faculty and staff and should be furnished appropriately. Below are tips to consider when designing these spaces to offer flexibility and comfort.



PEDAGOGY

- 1 Support individual, dyadic and team work in media labs, as well as spaces for instructor demonstration.
- 2 Allow students to temporarily own the space by accommodating their belongings and providing a range of tools.

TECHNOLOGY

- 1 In media labs, provide a means for users to keep their computer screens private (e.g. privacy screens, monitor arms).
- 2 Monitor arms free up worksurface space and allow adjustment of computer screens for a diverse population.
- 3 Provide multiple power outlets at worksurface height for portable technology phones, laptops, etc. to prevent students from unplugging other equipment to access power.

SPACE

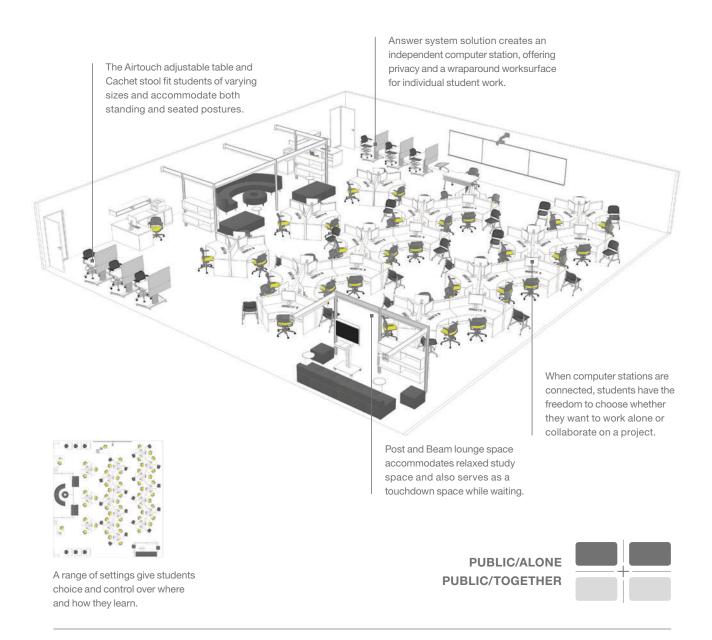
- Basics in media labs include adequate legroom, comfortable seating for long work sessions and worksurfaces that hold more than just a keyboard and monitor.
- 2 Use benching workspaces in media labs instead of freestanding desks to maximize real estate, route wires and cables to expand or contract simply and allow students the choice to connect with others or to work individually.
- 3 Students work with technology, printed materials and other students on group projects; plan pods with enough room for small groups and sufficient worksurface for a wide variety of student materials and personal items.
- **4** Screens between adjacent pods provide privacy and define territory.
- 5 Computer pods are effective when located adjacent to other work areas such as library project workspaces and lounge/collaborative areas.
- **6** Provide a range of choices for seated and standing postures.

Application Ideas: Media Labs

These space ideas are not simply for media labs but also for computer user spaces. Computer pods can be located wherever student traffic dictates, and they prove the concept that every space can be a learning space. Media labs/computer common spaces provide support for a variety of work modes, from waiting and reading to small discussions and, of course, dedicated work sessions with computer equipment.

Media labs

Designed for both individual and collaborative computer work, media labs let users expand the use of their space as necessary. Students can choose an individual work area or a space for team project work, or they can move easily between the two areas as their work requires. Educators can teach in these spaces and have easy access for assessment.



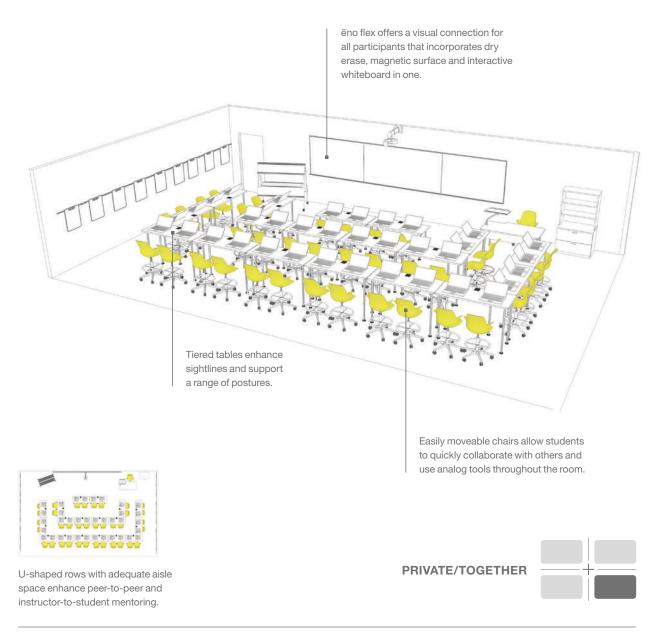
FEATURED PRODUCTS

Cachet chair132	Airtouch height-adjustable	media:scape mobile141
Cachet stool134	0 ,	
Await seating 134	Verb instructor station140	Post and Beam
Circa seating 135	ēno flex141	Duo storage
		Elective Elements

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Technology classroom

This technology-rich classroom provides the software and equipment needed for coursework. The tiered seating supports dynamic and transparent interaction between the host classroom and virtual participants, while enhancing overall sightlines.

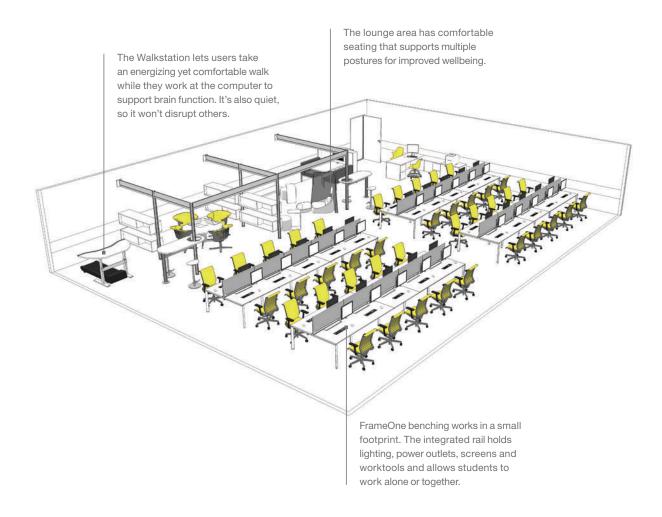


FEATURED PRODUCTS

Node seating	Verb easel
Groupwork table	Verb whiteboard 143
Verb instructor station140	Currency storage
ēno flex 141	

Media lab/computer commons

A space-efficient plan for a media lab and/or computer commons supports a variety of work modes and postures: sitting, standing, lounging and even walking while working; software is the key here for students, along with printing services.





FEATURED PRODUCTS

Campfire 135	Walkstation140	FrameOne
Hosu136	Victor 2 144	Post and Beam
i2i136	Enea stools	Duo storage
Regard137	SOTO II	Currency

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Customer Story Flagler County Public Schools, FL

Technology brings them in, then the classrooms bring them back.

facilities managers from around the country routinely visit Flagler County Public Schools in northern Florida because of their reputation as innovators in using technology in education, and as one of a global community of educational institutions advising Apple Computer on integrating technology into learning en- oped the Hive." vironments. However, what often surprises visitors isn't just Flagler's impressive technology, but how well the school integrates technology, furniture and space to create innovative, active learning classrooms. As a paperless school, each classroom is a modern day gy in the learning environment.

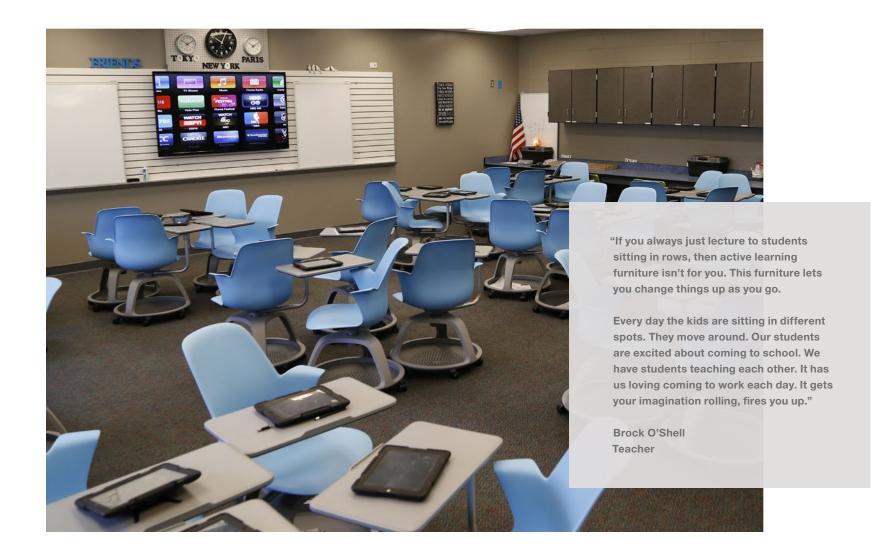
"The environment is the last place people look when they want to enhance student development, but it should be the first," says Joey DiPuma, innovation coordinator for the school district. "Every school has and do the same. a computer lab and they all look alike: a room with kids sitting at computers. We wanted to create a "Node lets us rapidly and precisely break out into small more effective active learning environment." Flagler's first atypical computer lab was dubbed Evolve. "It was our prototype, our first active learning space," says DiPuma. The room includes Akira mobile tables and Domino stacking chairs, Airtouch tables, plus Huddleboards and eno interactive whiteboards for displaying content.

"Evolve worked pretty well. Different teachers taught in the room, we did teacher development in there, and people started getting used to moving things around. Other schools started duplicating the space," says Joe Jakubowski, elementary school teacher. Flagler timed the opening of their next classroom space to Steelcase's introduction of Node student seating.

"When Node became available, we opened Sandbox. our next generation of active learning classroom with flat screens and more mobile furniture." As teachers and students used the Evolve and Sandbox classrooms, the ad hoc development team behind these new spaces - DiPuma, director of technology, Ryan Deising, and fifth grade teachers Jakubowski and Brock O'Shell - continually solicited feedback and Administrators, teachers, technology directors and suggestions. "Who else would know better what they need in the classroom?" says Deising. "We wanted to create something that everyone can use. So we tested different technology and furniture, filmed classes, and tracked the performance of everything in Evolve and Sandbox. Based on those learnings, we devel-

The Hive consists of two 24' X 24' classrooms, connected by an office, with one room for large group instruction and the other for breakouts. Flat screen monitors and audio systems boost content presenmedia lab designed to optimize the use of technolo- tation. Each student has an Apple iPad and a Node chair. The Hive allows two instructors to teach at the same time. "We don't have static teacher stations," says O'Shell, "so while I'm teaching reading, Joe can go around the classroom and help individual students, and while he teaches math I can go around

> groups or large groups. The kids can do it guickly and quietly. That's why we picked Node."



Despite the school's obvious technology advantages, DiPuma emphasizes that the Hive is far more than technology. "It's a different culture, a different way of teaching. It's not just the kids having iPads, or putting projectors or monitors in the room. It's the furniture, the design of the space, all of those things together." The teachers see huge benefits to how they have combined technology, furniture and space to further active learning. "We take small assessments all the time and we're seeing steady growth. This is not and your students," says Jakubowski. a hand-picked group of students. We have students with a different native language, a variety of abilities. "Then ask the question that we ask ourselves all the The kids really like being in this classroom. They can't wait to get in here, and that's really changed learning here," says Jakubowski.

"Our message to educators is that no matter what school you're in, you can create the same active learning environment in your school. Identify teachers who are willing to try new things. Learn with the kids. Break down the silos between departments. Don't be afraid to change things up. You don't have to know everything about the software and the apps, because the kids learn just as fast or faster than the teacher does. You just have to believe in your staff

time: what are we going to do next?"

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