

Building an Esports Lab: A Roadmap

On over 175 Higher Education campuses across the U.S., esports has become part of the fabric of learning. So, too, have the tools and resources these athletes need in order to compete.

Yet, in a growing number of institutions, esports is also becoming part of the curriculum—either as additional courses in the Science, Technology, Engineering, and Mathematics (STEM) majors or as its own major. In every case, schools are putting plenty of effort—and funding—into establishing esports labs.

Building a well-equipped esports lab takes planning and a focus on giving your esports athletes the tools and equipment they need to bring out their best. The goal: to build a space that they can walk into and start competing easily.

Here are some of the must-have elements for your esports lab.

The Roadmap

Before you build your esports lab, you need to know where your college or university's esports program is going. What games will you take part in? What leagues? How will esports be integrated into the curriculum? How much space will you need? What departments should be involved in the decision-making? How many esports athletes are you accommodating? How many computers and consoles will you need, and what games can they run? How many coaches? From there, you can start looking for your space.

Flexible Space

Because space always comes at a premium, especially on campuses, you should look toward starting with a flexible arrangement that incorporates a more multipurpose approach to the space. Computer labs can double as esports centers or vice versa. Fortunately, nearly all available space can be equipped to accommodate an esports team or lab. It can also be used by enrolled students who enjoy gaming, but who are not part of the team. Many schools set up specific hours for student use.

Adaptable Design

Where will your athletes compete? Look for design materials and equipment that can adapt to changing times and needs. As your esports team expands, so should the furniture and equipment that supports esports activities. Work areas, for example, should be constructed from easily modified systems that allow for adding on more stations. Modular design allows too for easy tear down and setup in a new space.

Ergonomic-friendly Furniture

Playing requires sitting and plenty of monitor time. Sitting for long stretches of time can put strain on the body, causing joint pain or injury if not addressed. Start with sturdy furniture designed for gaming—high-end gaming chairs, desks, or tables that can be adjusted or modified to fit the user. Adjustable monitors and well-lit spaces can also reduce the chance of muscle strain or injury.

Gaming Computer

A top-level esports lab needs computers built for gaming. Invest in the fastest available PCs with a central processor unit (CPU) intended for gaming, the latest graphics cards, a motherboard that can handle a top-flight processor, a cooling system built for the heat that gaming-specific components emit, and enough storage to meet or exceed current game requirements.

Accessories

The same amount of thought that goes into building your esports lab should be put into choosing the accessories your athletes will use. The sound quality of gaming headsets is important for players to hear every footstep or movement during a game. Displays, controllers, and keyboards should be built for gaming, and compatible with the games your esports teams are playing. Other important factors: ambient lighting and monitor arms for easy adjusting. Mice too take some research—some are designed for specific games, and many gamers prefer wired mice because of better response time.

Coaching Station

An interactive display allows coaches to review team play, interact with players, and make annotations over gaming footage. Other useful tools for coaches: gamepad and keyboard visualizers allow coaches to see user input; virtual cameras show live game action during one-on-one coaching sessions.

Cyber infrastructure

Collaborate with your school's IT department to build the best infrastructure for your esports lab. What is the available infrastructure, and what is needed to maintain optimum gaming levels for all players? Are there any internet connectivity issues that need to be addressed? How are the hardware and network specifications being accommodated?

Cybersecurity

Every esports lab needs solid cybersecurity protection. One cyber-attack can block your entire team from esports content and can put the school's own data files in jeopardy. Strong internet and virus security software is a start, but don't overlook firewalls and other protections. A virtual private network (VPN) allows for stronger encrypted internet access than your network firewall provides. Strong passwords and internet access protocols can keep intruders from infiltrating systems. Also, all esports athletes should be trained on how to spot phishing emails and where to report them.

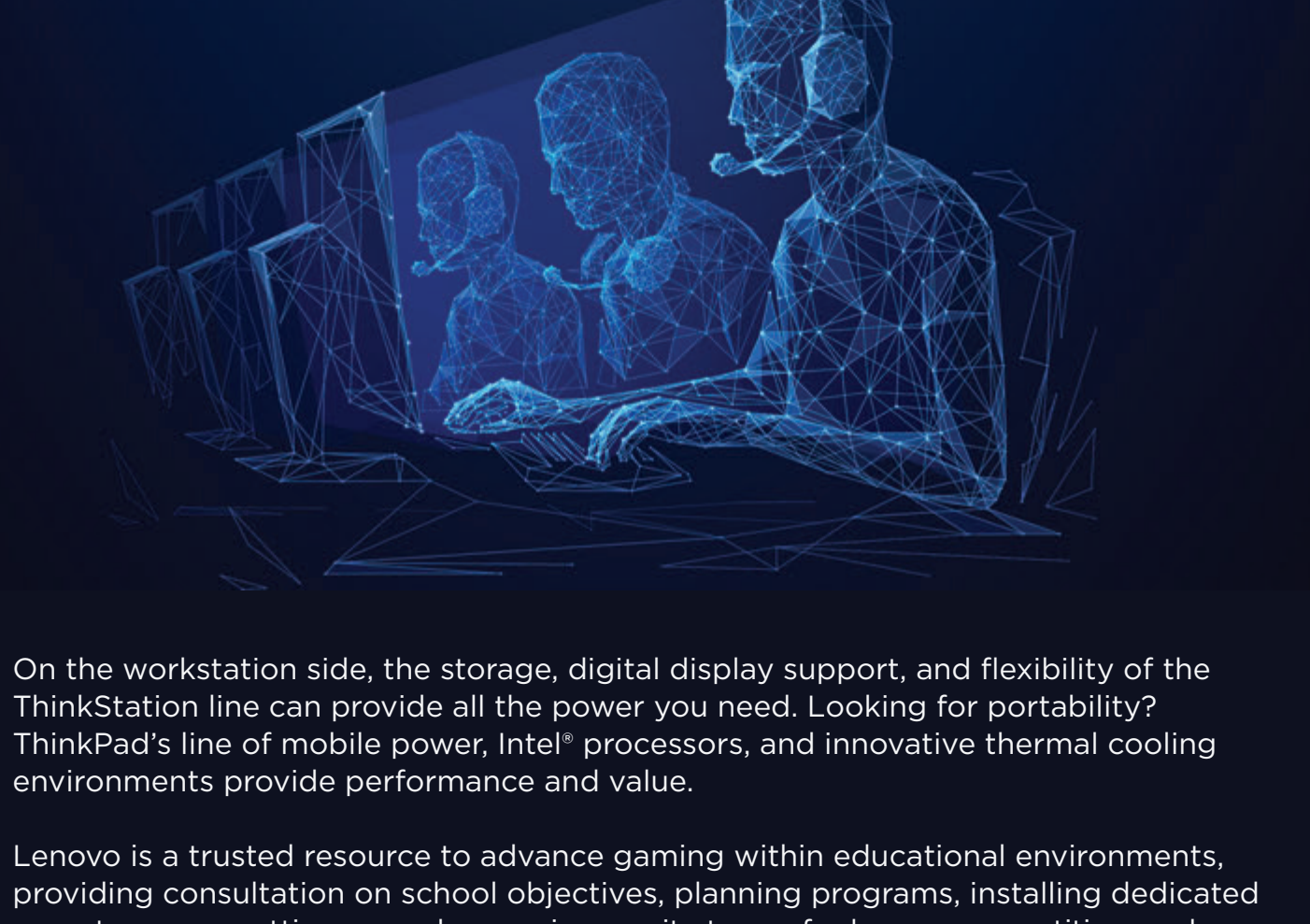
Noise Barriers

Sound panels on walls and carpeted floors can do a lot to reduce noise levels, but most esports labs will require more. Consider sound-dampening ceiling panels, and textile-padded partitions between gaming stations. If your space is large enough to allow it, set up dedicated quiet zones and separate lounge areas. If your space has windows, consider window glazing solutions that can decrease how much outside noise leaks in. If noise is still a problem, consider equipping your esports athletes with noise-cancelling headsets.

Build Your End-to-End Esports Solution

Creating an esports program that meets the many needs of students and schools can represent a complex challenge. Fortunately, **Lenovo Esports Solutions for Education** offers advisory services geared to bringing custom, end-to-end solutions for K-12 and Higher Education esports programs. Committed to building smarter technology and empowering students and teachers through transformative education solutions, Lenovo is helping esports level up the intersections of learning and gaming.

The Lenovo Esports Solutions for Education features a comprehensive portfolio of advisory and support services combined with equipment, software, and hardware.



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Lenovo is a trusted resource to advance gaming within educational environments, providing consultation on school objectives, planning programs, installing dedicated esports arenas, setting up and managing varsity teams for league competition, and more.

The solutions also helps students join a school's gaming network and play from home with matchups and leaderboards to spur competition and offers network and league management capabilities to maintain and enhance the experience for esports student athletes.

To learn more, visit [Lenovo Esports Solutions for Education](#).