SmartLab®

Engage Every Learner, Every Day

Engaging STEM Centers for Students of All Abilities and Interests

What's a SmartLab?

It's an engaging program where students explore STEM and media arts through applied technology and project-based learning. It's a fully integrated learning environment where everything from furniture and technology to curriculum and assessment work together to support hands-on, minds-on learning. In a SmartLab, personalized learning and intrinsic motivation engage students of all ages, interests and abilities.

There are SmartLabs for elementary, middle and high schools. There are SmartLabs that emphasize STEM, media arts or a blend of both. And in every one, students are creating remarkable projects that motivate them to inquire, explain, tackle new problems and celebrate their solutions.

> **"It's like a gymnasium for critical thinking."**
>
> Tom Delgado, Principal,
> Prairie View Middle School

In a SmartLab, learners apply a wide range of technologies to age-appropriate projects that matter to them personally and academically. Authentic assessment and meaningful reflection happen every day as students create ePortfolios to document and share their learning.

Students explore. They problem-solve. They collaborate and create. Most importantly, they learn.

It's what happens when we put educational technology where it belongs…in the hands of students.

Engaging STEM for All of Your Learners

We live in a world where science, technology, engineering and math (STEM) play a critical role in every job, every home, and every aspect of advanced learning. The integration of STEM disciplines is critical for all students, not just those who are naturally proficient in math and science.

Successful STEM programs engage students of all interests and abilities. They thrive because learning is truly personalized—individualized, differentiated and relevant to their unique interests and experiences.

High energy and deep engagement are part of every school day in SmartLabs throughout the U.S.

A Solid Foundation for College and Career Success

Success in higher education and the modern workplace also requires that students master next generation skills like communication, collaboration, critical thinking, problem solving, information literacy, and adaptability.

> "Our mission is to empower, explore, encourage, and excel in education. This happens every day in the SmartLab."
>
> Patricia Dierberger, Principal, Rocky Heights Middle School

Balancing traditional academics with the need to develop these skills is one of the most important challenges facing educators today.

We Plan Out Every Detail So You Can Focus On What You Do Best - Educating Students

A SmartLab is an innovative combination of curriculum and assessment, hardware and software, furniture, equipment, construction kits, professional development and ongoing support. It's a fully integrated, complete solution, so schools and districts can focus on their students rather than designing and procuring content, equipment and supplies.

And SmartLabs engage learners like nowhere else in school.

Walk into a SmartLab and you'll see students buzzing with energy and enthusiasm. It's a learning community where the teacher is a facilitator and students take responsibility for their own learning. Autonomy is encouraged, collaboration is the norm, and problems are celebrated as a path to mastery.

SmartLabs engage learners as they apply technology to projects they design, make academic connections and develop the skills they need for college and career success.

Elementary SmartLabs

How Was School Today?

It's a question that SmartLab students answer enthusiastically. Elementary students explore robotics, software engineering, mechanics and structures, circuitry, scientific data and analysis, sustainability, computer graphics and digital media arts. That's a great day at school!

Students rotate from project to project in upper elementary grades while whole-class, teacher-led activities provide age-appropriate guidance for younger learners. Students learn to develop project objectives and document their learning in ePortfolios, daily journals and project presentations.

In an elementary SmartLab, young learners discover a wide range of applied technologies. They engage in authentic first-hand experiences in STEM, building interest and inspiring many to pursue these fields in the years to come.

"SmartLabs have been the catalyst for increased engagement and enthusiasm in STEM in our district."

Dr. Carolyn Ross, Superintendent, Churchill County School District

Secondary SmartLabs

Middle School: Discovery. Exploration. Owning Their Learning.

SmartLabs are carefully designed and provisioned for each grade level. Every element – technology, classroom design, construction kits, curriculum and scope and sequence – works together to give students an appropriate starting point while inspiring them to take their work as far as they are able.

> **"The SmartLab creates an environment where students want to be involved."**
>
> Kurt Siebold, Principal, Slavens K8 School

In middle school SmartLabs, the emphasis is on discovery and exploration. Teams of learners apply a wide range of technologies to project work as they rotate through a carefully crafted sequence of learning engagements. Students' knowledge and skills grow from a broad base of foundational experiences to a dynamic mix of ideas and inspiration.

The SmartLab curriculum provides support where needed while encouraging and nurturing learner autonomy. Students explore the underlying principles in each system of technology and build connections to core academic content. Tutorials, resource guides and additional project ideas enrich every learning engagement.

Middle school SmartLab students are encouraged to choose an appropriate level of challenge, apply their own interests and learning styles, and explore questions of personal relevance. With increased autonomy, learners take more responsibility for their learning.

ePortfolio templates guide learners as they maintain daily learning journals, create project presentations and reflect on their learning.

High School: Pursuing Advanced Knowledge.
Building College and Career Connections.

In a high school SmartLab, students explore topics of interest and areas of technology in greater depth. Whether students are interested in digital media, robotics, software engineering or sustainability, the high school SmartLab helps take their learning to the next level.

Learning engagements are challenging and open-ended, often integrating multiple SmartLab technologies. Project objectives increasingly reflect real-world challenges requiring a transdisciplinary academic perspective. Complex objectives often require extended project cycles promoting advanced workplace skills like project planning and time management.

ePortfolio expectations increase with grade level and experience in the SmartLab.
Project presentations are more extensive, individualized and often utilize advanced digital media.

The SmartLab offers an important opportunity to make career connections, to explore real-world technologies, and identify a path for college and career success.

> **"The Creative Learning Systems SmartLabs have absolutely brought both girls and minorities into the STEM fields at our high schools."**
>
> Brian Ewert, Colorado Superintendent of the Year

Curriculum

A Powerful System for Personalized Learning

Learning Launchers™ are the foundation of SmartLab learning. It's a comprehensive, interactive, student-centric system developed by the curriculum specialists at Creative Learning Systems.

With more than 300 Learning Launchers to choose from, SmartLab students explore a wide range of projects and challenge levels. Students access the curriculum through our responsive and mobile-friendly, LaunchPad navigation system that also supports text-to-speech and translation for low-level and ELL students.

Each Learning Launcher engagement provides:

- Engaging, hands-on, minds-on, project-based activities in STEM, digital communications and related topics

- Technology applications to reinforce academics and build next generation skills

- Personalized learning with multiple challenge levels, open-ended activities and opportunities for students to pursue learning around their own interests, abilities and learning styles

- Connections to core academic content and alignment to standards

- Extension activities for advanced learners to explore topics in even greater depth

Learning Launchers provide a foundation in essential systems of technology including:

- **Circuitry**
- **Computer Graphics**
- **Digital Communications**
- **Mechanics & Structures**
- **Robotics & Control Technology**
- **Scientific Data & Analysis**
- **Software Engineering**
- **Sustainability**

> **"It's a robust learning environment for students that's relevant, rigorous, tied to core academics and aligned to standards."**
>
> Diana Zakhem,
> Postsecondary & Workforce Readiness Coordinator,
> Englewood Schools

The SmartLab ePortfolio System™

Authentic Assessment for Authentic Learning.

The SmartLab ePortfolio System™ provides a framework for documenting project-based learning and assessing next generation skills. It's a student-focused, integrated toolset to help learners manage project activities, document their learning and develop effective, high impact project presentations.

- Daily journals and project presentations support authentic assessment and reflection.

- ePortfolio templates guide learners in establishing project objectives and documenting process and outcomes.

- Flexible assessment rubrics allow learners and facilitators to assess learning and next generation skills including collaboration, project management and communication.

- ePortfolio templates can be easily modified and adapted to individual school learning objectives.

- The ePortfolio System is compatible with cloud or server-based configuration options.

- Cloud-based ePortfolios can be accessed from any Internet-connected computer or device.

- The System offers seamless integration with Google Apps for Education.

- Facilitators can organize, track and assess student work anywhere, anytime.

"A SmartLab has no boundaries. A place with no boundaries means kids exceed anything you ever expected."

Courtney Miller, SmartLab Facilitator, Slavens K8 School

Designing Your SmartLab

A SmartLab for Every Purpose.
A SmartLab for Every Budget.

Every school is unique. And so is every SmartLab.

Our experienced design consultants work closely with your education team to create the SmartLab that's right for you. We customize a solution to meet your educational objectives, class size, schedule and budget. We provide complete design and system specifications and coordinate with your facilities and IT staff as well as your architects and construction team to ensure a smooth implementation from start to finish.

From the moment you decide a SmartLab is right for your school, Creative Learning Systems is committed to designing and implementing a program to meet the unique needs of your learning community.
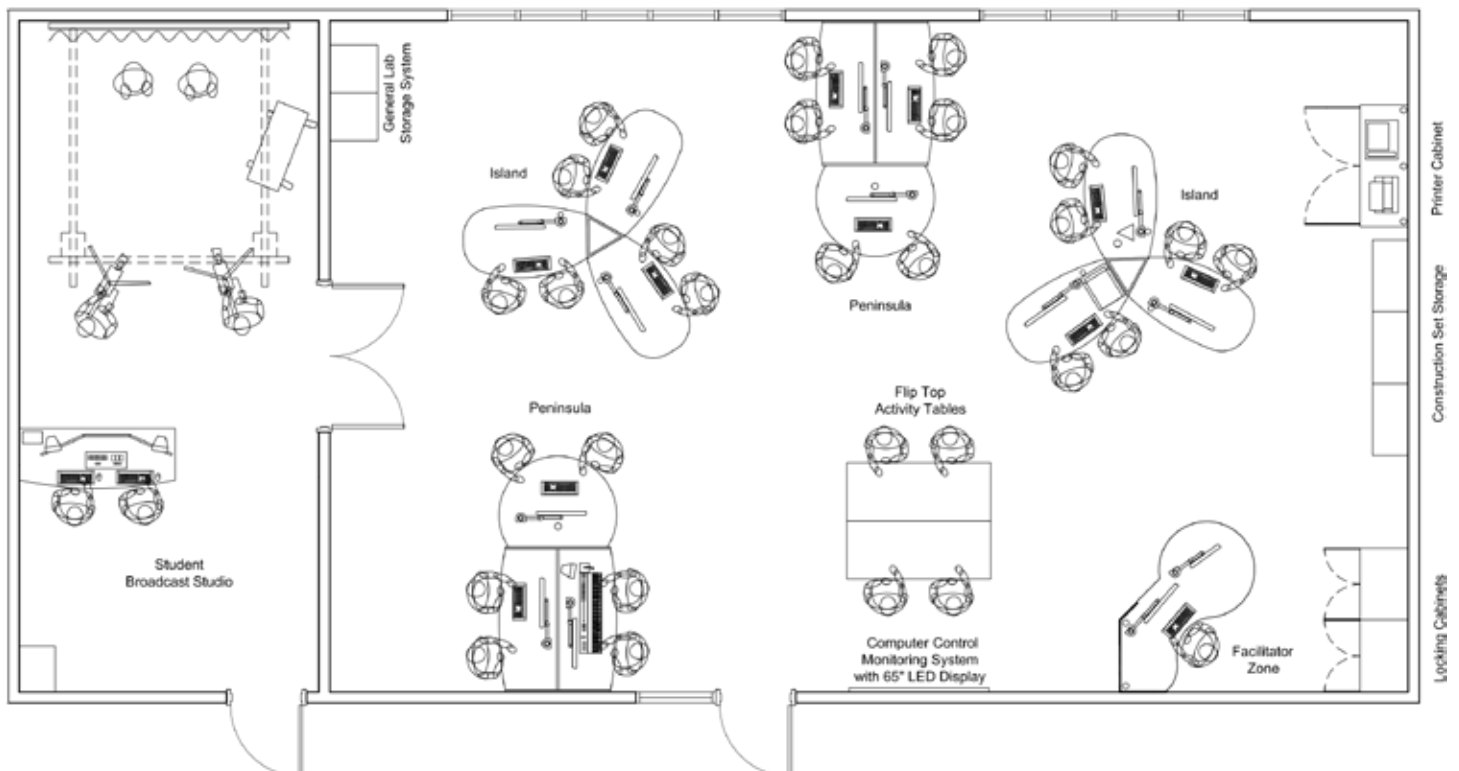
"Creative Learning Systems did a great job of listening to what we envisioned for our spaces and then worked out a design to fit our needs."

Bill Gilmore, District STEM Coordinator & Facilitator, Englewood Schools

Student Broadcast Studios

Build Communication Skills.
Broadcast like the Pros.

Creative Learning Systems is the expert in designing, implementing and supporting video broadcast systems for schools. We work exclusively with K-12 schools ensuring that every system we design is affordable and user-friendly while providing the same broadcast capabilities used in professional industry.

Boost students' writing, communications, creativity and organizational skills with our fully-integrated video production systems while you expand outreach to your school community.

Schools use Student Broadcast studios to:

• Produce and broadcast live student news and announcements

• Record and broadcast guest speakers, assemblies and school ceremonies

• Produce educational and entertaining videos

• Record and broadcast sporting events, concerts and other performances to your extended school community

• Create professional development, training and informational videos

• Produce promotional videos for local businesses and community groups

> **"Creative Learning Systems helped catapult our program from basic video production to a professional studio broadcast."**
>
> Chip Rutledge, SmartLab Facilitator
> Churchill County High School

Every system component is carefully selected and engineered to ensure ease of use for students and affordability for schools. Student Broadcast Studios include professional broadcast features like computer-generated virtual sets, chroma key and teleprompting. Systems also include broadcast and digital streaming capabilities, video editing and media storage, royalty-free sound and video clip libraries, professional lighting and audio equipment for a true turnkey solution.

We provide a wide range of broadcast solutions including:

• One-room studios perfect for daily video announcements

• Portable systems for sporting and other events

• Large production studios complete with control booth and cyclorama wall

Every Student Broadcast Studio is custom designed and provides a fully compatible engineered solution complete with professional development and ongoing support.

Professional Development

Professional development is an integral element of every Creative Learning Systems solution. Every SmartLab implementation includes comprehensive, one-on-one professional development in your SmartLab from our experienced trainers.

And that's just the start.

Our SmartLab experts are available for consultation and advice after installation. Webinars and professional updates keep facilitators abreast of the latest developments and build new skills. Annual conferences provide an opportunity to expand facilitation skills, learn new SmartLab technologies and share best practices with other facilitators from all over the country. We can even help you provide orientations for more of your teaching and administrative staff.

Service, Support, and Sustainability

Creative Learning Systems protects your SmartLab and Student Broadcast Studio investment with comprehensive service, support and sustainability plans. These plans ensure that your program will continue to meet the needs of your educational community and keep pace with ever-changing technologies.

Our experienced team takes care of every installation detail ensuring that your program is complete, organized and ready for learners.

We stand behind everything we provide – from furniture to software to media systems and classroom kits. Technical support is only a phone call away and provided directly by Creative Learning Systems technical support specialists.

> **"Creative Learning Systems has really been essential to my success as a facilitator and my students' success in the program."**
>
> Tom Collins, STEM Program Facilitator, Rogers Middle School

Best Practices for STEM Programs

The characteristics of successful STEM programs and the key elements of every SmartLab program have a great deal in common.

☑ **Integrated Content**
Science, technology, engineering and math are approached from a real-world, integrated perspective.

☑ **STEAM and Beyond**
A true transdisciplinary framework integrates fine arts, social studies and language arts to build relevance and appeal to a broad range of learner interests.

☑ **STEM for ALL Students**
Effective STEM programs engage and inspire students of all abilities and interests and accommodate a wide variety of learning styles.

☑ **Next Generation/21st Century Skills**
Higher order skills, including problem solving, critical thinking, creativity, collaboration, communication, time management and adaptability are focal points.

☑ **Personalized Learning**
Personalized learning is individualized, differentiated, and relevant to the interests and experiences of all students.

☑ **Project-Based/Problem-Based Learning**
Students learn STEM content through hands-on, minds-on projects. Genuine learner inquiry and a problem-based perspective enrich student engagement.

☑ **Authentic Assessment**
Learners document and present their learning through ePortfolios or similar methods.

☑ **Integrated Learning System**
All program elements, including classroom configuration, hardware, software, kits and equipment, curriculum and assessment, and professional development support learning objectives.

☑ **Technology-Enabled Learning**
Professional-standard technology tools are integrated into everyday workflow.

☑ **Learning Technology vs. Teaching Technology**
Technology is in the hands of the students, not just teachers, administrators and service providers.

☑ **Emphasis on Applied Technology**
Application of technology tools is emphasized over specific skills that become obsolete as technology changes.

☑ **Career Connections**
Content explores connections between project engagements and related careers.

☑ **Teacher as Facilitator**
Teachers assume the role of facilitator and students are empowered to take responsibility for their own learning.

☑ **Collaboration**
Students work in pairs or larger teams. Quality collaboration is as important as the final work product and is part of the regular assessment process.

☑ **Articulated Learning**
Program elements scaffold from K-12 with increasing levels of challenge and self-direction.

☑ **Open-Ended Learning**
Students select an appropriate level of challenge and take their projects as far as they're able.

☑ **Supported and Sustainable**
Ongoing professional development is an integral program element. Program continuity is not dependent upon a single teacher. Program technology is readily available. Technology and curriculum resources are regularly updated and augmented.

Take Your STEM Program to the Next Level

Since creating the first technology lab in a U.S. school in 1987, over 3 million students have benefited from SmartLab programs. Each SmartLab is a unique learning solution designed to meet the needs of our school partners and their learning community. It's a thorough and collaborative process tailored to your academic goals, schedule and budget.

Together, we'll develop a SmartLab solution that will launch your students on a path of discovery, learning, and success.

Next Steps

Speak with one of our educational design consultants

Arrange a personal visit to a SmartLab in your area

Request a custom quote

Explore funding options with our team

Call or Visit Us Today!

800-458-2880
CreativeLearningSystems.com

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