smartlab
HQ

PROPOSAL

FOR: Youngsville Middle/High School
YOUNGSVILLE, PA
July 13, 2023

Version 2

24 Learner SmartLab HQ for grades 6-8
CLS supplied Dell PCs
Customer supplied Chairs
Padcaster, CNC, and Laser Collections

ADMINISTRATIVE SUMMARY

A SmartLab HQ is a fully-integrated STEAM learning environment where everything—from the furniture to the curriculum and assessment—works together to support hands-on, minds-on learning.

At Creative Learning Systems, we design learning programs where personalized learning and intrinsic motivation engage students of all ages, interests, and abilities.

Every element in a SmartLab program has been thoroughly tested and evaluated for reliability and applicability to classroom learning.

By lending our expertise in designing next-generation STEAM programs, you can focus on what you do best: educating your students.

Learning is Different Here

In a world where science, technology, engineering, and mathematics are critical to every job, field of study, career, and even home life, it's essential that every learner has a strong foundation in STEAM, not just those who are naturally proficient in math and science.

SmartLab programs engage all learners in a hands-on, project-based learning approach in which STEAM disciplines are seamlessly integrated. In a SmartLab HQ, learning is highly personalized and empowers students to shape their learning to meet their individual interests, abilities, and learning preferences.

Our proprietary learning approach is a five-phase cycle: explore, plan, do, reflect, and share. This philosophy meets students where they are and helps them develop the necessary skills to ask questions and find answers.

College and career success also demand a robust set of 21st-century skills, such as problem-solving, critical thinking, communication, collaboration, creativity, and effective application of technology.

A SmartLab HQ provides a complete STEAM program that engages students in personalized learning that prepares them for academic and career success.

What's the Next Step?

We have prepared this proposal in response to your desire to provide meaningful STEAM learning for the young people you serve.

We can't wait to install a customized SmartLab HQ that meets your school's goals. We look forward to seeing the positive impact your decision will have on your students.

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YOUR SMARTLAB HQ INCLUDES:

Service

Before implementation

- Personalized consultation, planning, and design services
- Resources and tools for fundraising

During implementation

- Project planning and coordination between school/district IT, facilities staff, and installation contractors
- Network and server integration
- Computer configuration and software installation
- Shipping and installation of all SmartLab Deliverables (see Attachment A)
- Personalized training for your SmartLab Facilitator and other teaching staff

After implementation

- Continued consultation, professional development and one year of instructional coaching
- Ever-growing library of online teacher and classroom resources
- Technical and pedagogical support
- One-year comprehensive warranty for all equipment, materials, and software
- A range of Curriculum and Support options to ensure the success of your SmartLab for years to come

Curriculum

- 400+ fully-articulated online curriculum titles for K–12 learning engagements
- ePortfolio development tools and templates for authentic assessments
- Fully-vetted construction sets, software, electronic, scientific, media, and classroom equipment that complement and enhance the curriculum

Infrastructure

- ADA-compliant, collaboration-driven furniture designed for dynamic learning (student and facilitator workstations, cabinets, kit storage systems, and flexible monitor arms)
- Large classroom display
- Computer management and control systems
- Classroom server

SMARTLAB LEARNING

Every SmartLab program is designed with the student experience at its core. Likewise, we recognize and celebrate the importance of impactful educators on successful learning.

SmartLab Learning focuses on supporting students and educators with the tools and resources necessary to engage in meaningful and authentic learning experiences in a supportive learning community.

In bringing a SmartLab HQ to your school, you are partnering with an organization with decades of experience developing impactful learning programs to schools across the United States.

The following sections provide details about the scope of the SmartLab HQ learning program that is proposed for your school, as well as information regarding the deliverables and services that this program includes.

STANDARDS ALIGNMENT AND ASSESSMENT

As students complete SmartLab projects, they are naturally exposed to the content and skills outlined in standards at national and state levels. Our focus on the student experience while addressing standards is coupled with resources to support authentic assessment in the SmartLab HQ.

Students and facilitators can easily identify and document the standards addressed with each learning engagement using our digital platform.

Directly provided standards alignments include:
- Next Generation Science Standards (NGSS)
- Common Core State Standards (Math)

SmartLab Content also aligns to:
- ISTE Standards for Students
- Science and Engineering Practices
- Common Core State Standards (ELA)

Throughout each project, students participate in formative assessments and document their work using summative project journals and portfolios. This provides them with opportunities to regularly assess their own work as well as perform peer evaluations to improve together.

Students also regularly share their work through project presentations to develop effective communication skills. As they prepare each project presentation, they collaborate with others to reflect on and share their own learning journeys.

During initial training, and as part of the first year of instructional coaching, we will support your Facilitator in customizing resources and assessment tools to focus on the specific skills and content that matter most for your program.

Middle School Layer

The SmartLab HQ program designed to serve middle school learners provides a broad range of experiences for students in grades 6-8. As students work in pairs for each project, they practice effective collaboration and communication skills to work toward a shared objective.

Each pair of students in a middle school SmartLab HQ works on a different project following a sequence of engagements that can be modified to meet the objectives of your school. As students cycle through each project, they gain valuable skills and familiarity with content that they can apply to each new experience.

In a typical SmartLab HQ, each pair of students is seated near two other pairs of students, making expanded collaboration or peer help readily available. As your students and facilitators become more comfortable with the tools and processes in the SmartLab HQ, they are encouraged to develop new and exciting projects using the available resources.

Our leveled project starters provide students with entry points to match the experience they may already have with the SmartLab tools and technology. The different levels also give students the opportunity to challenge themselves by exploring more challenging projects and concepts.

Key Learning Objectives for Grades 6-8

Students apply what they learn about electricity to build and program digital circuits using microcontrollers and electronic components.

Students capture and produce content in various formats including digital, print, and audio. They use word processing programs and presentation software to document projects and share their learning.

Students design, program, and debug robots to solve complex problems efficiently.

Students use a variety of programming languages to code animations, games, apps, and circuits.

Students apply different software programs to design 3D objects and edit photos to share their own ideas.

Students apply the engineering design process, to iteratively design structures and mechanisms to increase the strength, performance or efficiency of their designs.

Students apply the scientific method to perform experiments that involve collecting data using sensors. They use tables and graphs to represent their data and analyze their findings to share what they observe.

Students explain how renewable energy is used to power machines and how to use energy more efficiently.

WHAT WE PROVIDE

Everything that we provide—from furniture and technology to kits, equipment, and accessories—has been carefully curated to provide the best learning experience possible for your students. The information below outlines the range of products included in this proposal.

LEARNING KITS AND EQUIPMENT

All of the kits, equipment, and accessories provided in your SmartLab HQ support students as they complete and document each project.

To enable the breadth and depth of experience that our program offers, we provide a range of learning kits, including robotics systems, media equipment, scientific sensors, electronics building materials, and more.

We also provide kits to support multiple classes working on the same materials so students can spend their time building and exploring instead of taking their projects apart for the next group. Some kits require consumables, so we provide accessory collections to ensure students have exactly what they need.

For a complete list of the kits, equipment, and accessories included in your SmartLab HQ, see **Attachment A**.

COMPUTERS AND SOFTWARE

Learners make use of a range of computer applications and platforms for their work in a SmartLab HQ. Our learning program guides students to use each application effectively for each project.

In a typical SmartLab HQ, each pair of students shares a computer to document their learning, write computer programs, create digital art, or engage in other projects.

The specific computers for your SmartLab HQ may vary to match the goals or platform preference of your school.

For specific details about the computers for your SmartLab HQ, see **Attachment B**.

FURNITURE AND FIXTURES

The furniture included in your SmartLab HQ is designed to provide dedicated workstations for each pair of students working on a project. Our student workstations are also grouped together to provide each pair of students with two other pairs nearby for additional collaboration.

Each SmartLab HQ also includes a desk and storage for the SmartLab Facilitator, which provides a comfortable workspace for the educator(s) at the heart of the SmartLab learning program.

We include plenty of storage solutions for the kits, equipment, and other materials included in your SmartLab HQ, including locking storage for high-value items.

For specific information about the furniture included in this proposal, see **Attachment C**.

ONE-YEAR COMPREHENSIVE WARRANTY

All of the items provided by Creative Learning Systems for your SmartLab HQ are covered by a 1-year comprehensive warranty.

When available, the items that we provide may also be covered by a manufacturer warranty that extends beyond the Creative Learning Systems Warranty Period.

Additional warranty details will be included at time of purchase.

SUPPORTING YOUR SUCCESS

Partnering with us to bring a SmartLab program to your school is a valuable investment in your students, faculty, and community. The services we provide extend far beyond initial consultation and implementation. Our goal is the ongoing success of your SmartLab HQ to provide meaningful learning for years to come.

PROFESSIONAL DEVELOPMENT

Comprehensive professional development is a critical element of the continuing success of your SmartLab program. During the first year, you'll receive ongoing SmartLab professional development that includes initial training, one year of instructional coaching, and registration to the Annual SmartLab Conference. After completing our PD sequence, your Facilitator will receive the SmartLab Facilitator Certification from Creative Learning Systems.

Initial Professional Development

The purchase of a SmartLab includes initial training with the designated facilitator(s). This training program allows participants to experience SmartLab Learning firsthand, familiarizing them with the pedagogical approach and resources available to implement student-directed learning.

Additional staff members are encouraged to participate in portions of the onsite training to see how the SmartLab will support learning in their school.

Instructional Coaching

After initial training, facilitators continue to receive support from an experienced instructional coach for one school year. Each month, the facilitator and coach will meet one-on-one for one hour. Throughout the year, the facilitator will participate in coaching cycles where they analyze the current reality of the SmartLab, set and achieve goals, identify and practice strategies to foster growth, and receive job-embedded professional learning. This coaching is specifically set up to help not only with implementation, but also with advancing the instructional approach and facilitator strategies, ultimately improving student outcomes in your lab.

SmartLab Conference

Facilitators can further their skills by attending the Annual SmartLab Conference. The conference provides opportunities for Facilitators to network, share ideas, and gain exposure to new technologies and practices. Conference registration for one facilitator is included in the initial SmartLab purchase.

ONGOING SUPPORT

We are committed to the long-term success of your SmartLab HQ.

In addition to the first year of comprehensive technical and pedagogical support included in your initial purchase, we offer a choice of Curriculum and Support Agreement plans to protect your SmartLab investment for years to come.

All Agreements provide school-wide access to online curriculum and classroom resources including new curriculum and updates as well as continued access to technical and pedagogical support via phone, email, and remote assistance.

See **Attachment E** for more details about the Curriculum and Support Agreement Options.

SMARTLAB ENHANCEMENTS
Padcaster Collection

The Padcaster Collection is a truly mobile solution to providing students an opportunity to film, edit, and share live and produced video content.

This collection includes everything that your students will need for broadcasting on-site or in studio.

This collection includes a custom Padcaster kit that will enable your students to take on the many roles of a film crew, including scriptwriter, director, camera operator, and on-screen talent.

As they work together for each production or broadcast, your students will develop collaboration and communication skills that they can use in all parts of their lives.

Possible projects include:
- Book reviews and trailers
- Teacher, administrator, staff, student, and guest spotlights
- Highlight reels for school sporting events, plays, concerts, and competitions
- How-to and instructional videos
- Flipped learning
- TV shows, commercials, and short films
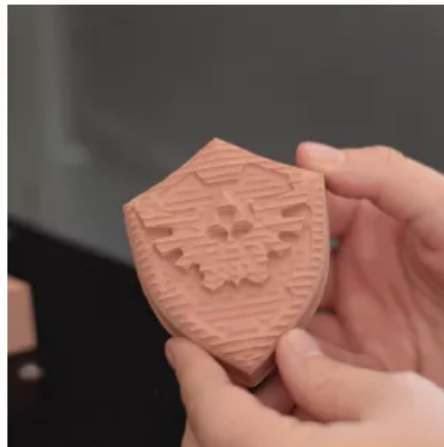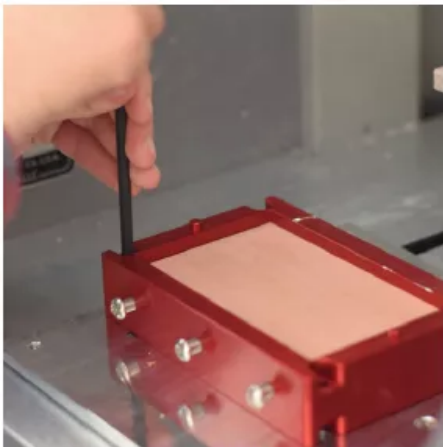
SMARTLAB ENHANCEMENTS
CNC Milling Collection

The CNC Milling Collection includes tools, resources, and materials needed to cut, engrave, and design 2D and 3D products. Almost everything that is manufactured today involves some form of CNC milling, including cars, computers, phones, and furniture. As students design and mill their own creations, they will develop skills that can immediately be applied in college or a career.

With the CNC Milling Collection, students learn industry-standard computer-aided design (CAD) techniques and software while creating 2D and 3D objects using a range of materials. They also learn about computer-aided manufacturing (CAM) processes as they prepare their designs for milling using the software included in the collection.

Students can easily create:
- Replacement parts for SmartLab kits
- Replicas of historical artifacts for school exhibitions
- Locker and desk decorations
- Personal accessories like jewelry, bag tags, and phone stands
- Custom toys and games
- Assistive devices to help individuals with disabilities
- Gifts for family, friends, and teachers
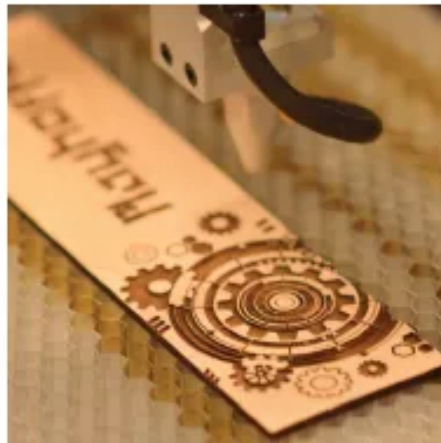
SMARTLAB ENHANCEMENTS
Laser Engraving Collection

The Laser Engraving Collection provides students with an additional way to take their designs from idea to reality.Similar to 3D printing, students use computer software to create designs that they can cut, score, and engrave on a wide variety of materials.

The Laser Engraver included with this collection is fully enclosed and includes a high-quality filtration system to eliminate the need for additional room preparation or venting.

As students prepare designs for the Laser Engraver, they explore computer graphics concepts in greater depth to combine vector and bitmap images to achieve different purposes.While combining different types of graphics, they must plan their designs carefully to utilize materials in the most efficient way possible.

Students will be able to:
- Design and create decorative and functional items from a range of flat materials
- Develop product and business ideas that incorporate laser-engraved items
- Explore the capabilities of a powerful laser system to determine the best settings for different materials
- Customize personal belongings like jewelry, notebooks, and phone and tablet cases

PRICING

Description	Price
24 Learner SmartLab HQ for Middle School (6-8)	$170,754.00
SmartLab Computers (13 Dell All-in-One PCs)	$26,546.00

SmartLab Enhancements

Padcaster Collection	$3,802.00
CNC Milling Collection	$7,609.00
Laser Engraving Collection	$14,236.00
SmartLab Total	**$222,947.00**

Curriculum and Support Agreement (beginning in year 2)	Price
LearningHub Curriculum and Support Agreement - Plus Plan (annual amount)	$7,000.00

Items not included (Customer-supplied)

Estimated Cost

- Student and Facilitator Chairs $ 11,915
- Display (TV/Projector)
- Room Readiness (as needed)
- Network Virus Protection

Contact

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Note: This proposal is based on the Creative Learning Systems SmartLab programs and pricing policy at the time of this writing, is valid **for 60 days**, and may change to reflect any updated policies.