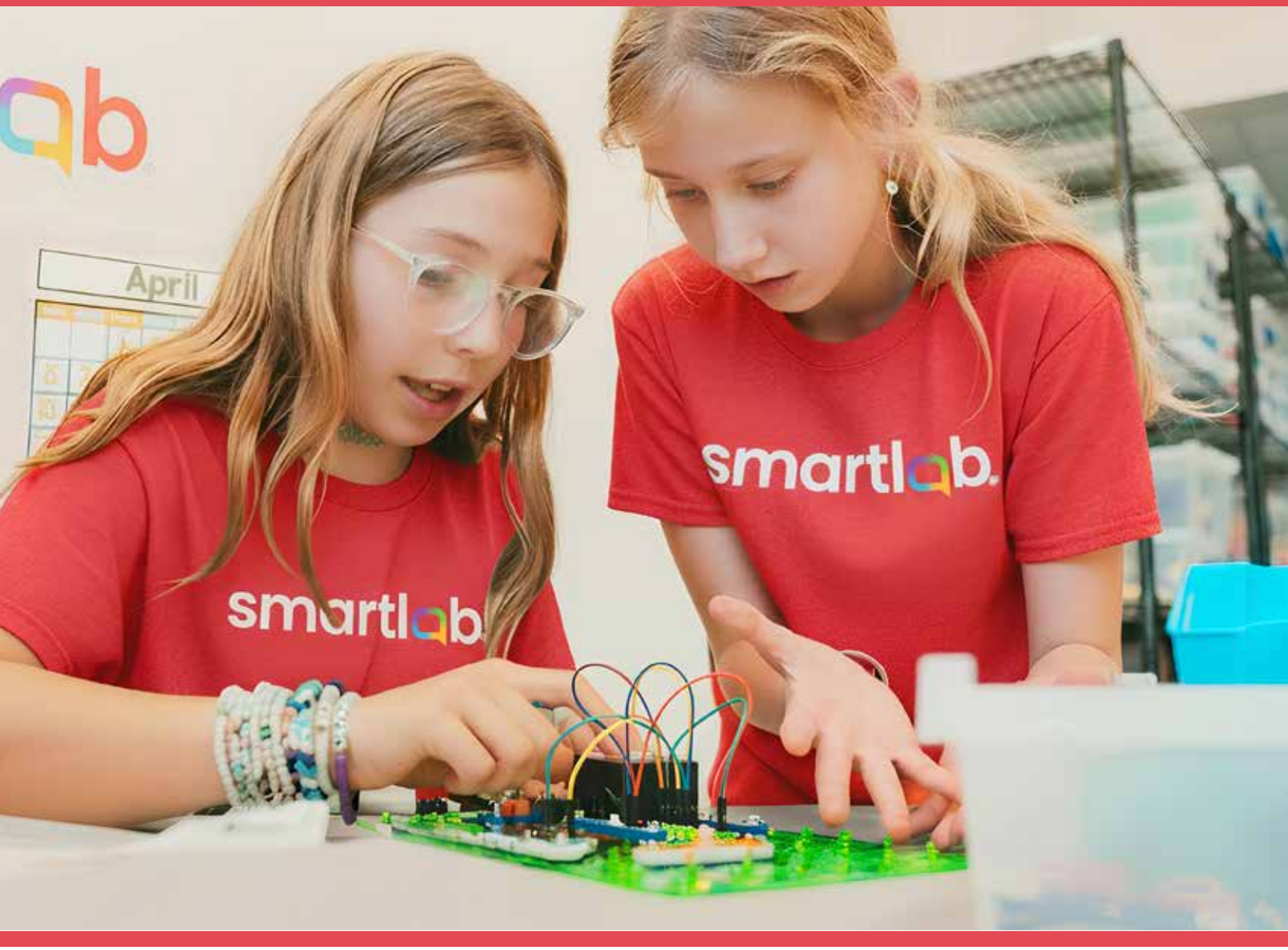
SMARTLAB® EBOOKS

Perkins V CTE Grant Alignment Guide

How SmartLab Supports Career and Technical Education



Navigate CTE funding options to build a lasting, impactful STEM program.

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Dear Educators,

Career and Technical Education has never been more important. As workforce needs continue to evolve, schools are being asked to prepare students with the technical skills, problem-solving abilities, and career awareness needed for future success, while navigating increasingly complex funding and accountability requirements.

We built this guide to be a practical resource for district leaders, CTE directors, grant administrators, curriculum leaders, and educators who are planning, funding, and implementing career-connected learning programs. Inside, you'll find information about Perkins V priorities, SmartLab's alignment to key CTE objectives, eligible funding categories, and resources to support planning, documentation, and implementation.

Whether you're exploring a new CTE initiative, expanding existing pathways, or strengthening workforce readiness opportunities, we hope this guide serves as a valuable resource throughout the process.

How to Use This Guide

Understand Perkins V Priorities

Explore the key goals and funding requirements that guide Career and Technical Education investments.

Review SmartLab Alignment

See how SmartLab supports college and career readiness, workforce development, professional learning, program improvement, and equitable access.

Identify Eligible Funding Opportunities

Learn how different components of the SmartLab ecosystem may align to allowable Perkins V expenditure categories.

Build Your Funding Strategy

Use the talking points, documentation resources, and alignment information to support planning and budget conversations.

Take the Next Step

Work with your SmartLab Partner to identify opportunities, develop funding narratives, and create an implementation plan that aligns with your goals. Our team can help identify alignment opportunities, support funding conversations, provide documentation resources, and assist with grant planning.

Contact us at smartlablearning.com/lets-talk or by emailing smartlabteam@creativelearningsystems.com.

With gratitude,

The SmartLab Team

Did you know?

SmartLab is not a single product. It is an integrated ecosystem purpose-built to develop the technical skills, problem-solving dispositions, and career-connected identities that CTE funding is designed to support.

What Is CTE Funding — and Why Does It Matter?

A Familiar Funding Situation

Career and Technical Education (CTE) funding — anchored by the federal Carl D. Perkins Career and Technical Education Act (Perkins V) — is one of the most significant and flexible funding streams available to schools and districts investing in workforce-readiness, STEM, and student success. Perkins V allocates federal funds to states, which distribute them to local educational agencies (LEAs) to support programs that prepare students for both college and careers.

For schools considering SmartLab, this funding stream is often an ideal fit.

SmartLab is not a single product — it is an integrated ecosystem purpose-built to develop the technical skills, problem-solving dispositions, and career-connected identities that CTE funding is designed to support.

The Five Pillars of the SmartLab Ecosystem

Every pillar plays an equal role. CTE funding can often support investment across all five.

How SmartLab Aligns to Perkins V

Perkins V identifies specific uses of funds that LEAs must demonstrate in order to qualify for and sustain CTE allocations. SmartLab's integrated ecosystem directly addresses each core Perkins V priority area.

Perkins V Priority	SmartLab Alignment
Challenging Academic and Technical Standards	**SmartLab curriculum is built around eight career-connected Areas of Exploration** — Circuitry, Manufacturing Technology, Robotics & Control Technology, Software Engineering, Environmental Technology, Scientific Data & Analysis, Mechanics & Structures, and Communication & Media Arts — each mapped to rigorous academic and technical standards including CCSS, NGSS, and ISTE.
Work-Based Learning and Industry Connections	**SmartLab's project-based challenges** position learners as professionals — energy managers, safety engineers, media producers, and software developers. Real-world problem contexts connect classroom learning to industry roles, building career awareness from elementary through high school.
College and Career Readiness	**The SmartLab Spark Scope and Sequence** is designed to spiral across grade bands (K-2, 3-5, 6-8, 9-12), so learners progressively build technical competency and develop a strong STEM identity — the deeply-held belief that I belong here, I can do this, and I add value — before leaving secondary education.
Preparation for High-Skill, High-Wage, or In-Demand Occupations	**SmartLab's eight Areas of Exploration** directly map to high-demand career clusters: engineering and technology, computer science, media and communications, environmental science, and advanced manufacturing — all sectors identified as priority fields for workforce development.
Comprehensive Professional Development	**SmartLab Certified Facilitator (SCF) training** is a cornerstone of the ecosystem. Foundations training (virtual cohort or onsite) provides 20+ hours of active, job-embedded professional learning. Ongoing Extend Trainings expand facilitator skills in specific technologies and instructional practices at no additional cost.
Equitable Access and Support	**SmartLab's learning environment** is designed with ADA-compatible furnishings, MAS Certified Green materials, and flexible configurations to ensure every learner — regardless of background, learning style, or ability — can access rigorous STEM experiences.
Program Improvement and Accountability	**SmartLab provides multiple mechanisms for measuring program efficacy:** NPS surveys, LearningHub usage tracking, CSA renewal data, ISTE Seal alignment, and a Johns Hopkins University efficacy study (Explorer and Pathfinder programs) that measures impact on science achievement, math achievement, and STEM identity.


Primary - Circuitry

Eligible Uses of CTE Funds Across the SmartLab Ecosystem

Perkins V funds can be used for a broad range of allowable expenditures. Because SmartLab is an ecosystem — not a single item — different components of the SmartLab program may each qualify under different eligible use categories. The chart below provides a framework for how school districts and CTE coordinators can map SmartLab investments to eligible Perkins V expenditure categories.

Note: Specific eligibility determinations are made at the state and local level. SmartLab recommends working with your CTE director and grant administrator to confirm allowable uses in your state.

SmartLab Component	Eligible Use Category	Notes
Career-Connected PBL Curriculum	Curriculum and Instructional Materials	Project starters, digital platforms (LearningHub, Curriculum Compass), and activity content that deliver career-connected learning experiences.
Hands-On Tools and Equipment	Equipment, Technology, and Instructional Supplies	Kits, sensors, robotics, 3D printers, drones, circuitry, fabrication tools, and other lab equipment used in hands-on STEM learning.
STEM Learning Environment	Facility Improvements and Renovations	Furniture, environmental design, and space customization directly tied to the CTE program space. White-glove installation supports immediate program launch.
SmartLab Certified Facilitator Training	Professional Development for Teachers and Staff	Foundations training (virtual or onsite), Extend Trainings, and ongoing coaching to ensure facilitators can deliver high-quality CTE programming.
Ongoing Support and Partnership	Program Improvement and Technical Assistance	Annual Customer Success agreements, support platforms, and partnership resources that sustain and improve program quality year over year.

Making the Case: SmartLab as a CTE Program Investment

When presenting SmartLab as a CTE funding opportunity, it is important to communicate that SmartLab is not a lab or a product line — it is a complete CTE program infrastructure. Each component is interdependent, and the value of the ecosystem is realized when all five pillars are healthy and fully implemented.

The ah-HA! Moment at the Center

Every design decision in SmartLab is oriented toward creating the conditions for learners to experience ah-HA! moments — those sudden realizations that happen when a student connects ideas in a new, meaningful way. These moments are not accidental. They are sparked by curiosity, hands-on engagement, and authentic problem-solving. And they are the mechanism through which SmartLab builds something Perkins V explicitly values: a strong, durable STEM identity.

A learner with a strong STEM identity knows:

- I belong here.
- I can do this.
- I add value.
- I am future ready.

This is not an abstract outcome. It is the foundation for every career decision a student makes after leaving school.

K-12 Career Awareness, Exploration, and Preparation

CTE funding increasingly supports programs that begin building career awareness well before high school. SmartLab is uniquely positioned to serve this need across the full K-12 spectrum:

Grade Band	SmartLab CTE Value
Primary (K-2)	Foundational exposure to STEM problem-solving through hands-on, structured exploration of all eight Areas of Exploration. Students begin developing the habits of curiosity, persistence, and collaboration that form the bedrock of a STEM identity.
Elementary (3-5)	Increasing challenge and complexity across project starters. Learners begin connecting technical skills to real-world applications — renewable energy, structural design, data collection — building career awareness through doing.
Middle School (6-8)	Deepening exposure with spiraling complexity. Students revisit each Area of Exploration with more sophisticated tools and projects, beginning to form preferences and interests that will guide elective and course selection in high school.
High School (9-12)	SmartLab 1 and SmartLab 2 courses provide a structured pathway for elective CTE enrollment. Students work with industry-grade tools and apply skills in contexts that mirror professional workflows, building a portfolio of competencies relevant to high-demand career clusters.

Supporting Your CTE Grant Documentation

Perkins V requires LEAs to document program quality, student outcomes, and continuous improvement. SmartLab provides built-in resources to support CTE reporting requirements, including standards alignment, professional learning documentation, program efficacy research, and implementation data. These resources help districts demonstrate program impact, support funding applications, and communicate outcomes to stakeholders.

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Standards Alignment Documentation

SmartLab project starters include targeted academic and technical standards for every activity, including CCSS (Math and ELA), NGSS, and ISTE standards.

This documentation supports:

- Demonstrating alignment to state CTE content standards
- Justifying curriculum as academically rigorous
- Providing evidence for program approval and review processes
- Supporting Perkins V funding applications and program narratives
- Connecting STEM learning experiences to college and career readiness goals
- Providing clear evidence of instructional alignment for district leaders, school boards, and state education agencies

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Program Quality and Efficacy Evidence

- **ISTE Seal of Alignment:** SmartLab has earned the ISTE Seal through a rigorous third-party review process, confirming alignment to national technology education standards.
- **Johns Hopkins University Efficacy Study:** An independent study measuring the impact of SmartLab on science achievement, math achievement, and STEM identity (Explorer and Pathfinder programs).
- **NPS Surveys:** Bi-annual surveys collecting quantitative and qualitative data on customer experience and program effectiveness, distributed twice per year.
- **LearningHub Usage Data:** Ongoing platform engagement data that serves as an indicator of program implementation depth.
- **CSA Renewal Tracking:** Year-over-year renewal rates that reflect sustained program value and community investment.

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Professional Development Hours

Perkins V requires documentation of PD quality and hours. SmartLab provides:

- **Foundations Training (Virtual Cohort):** Approximately 20 hours of initial training, including async prework and live weekly sessions across five consecutive weeks.
- **Foundations Training (Onsite):** 20+ hours of in-person, hands-on training conducted directly in the SmartLab space, with coaching, real-time practice, and administrator touchpoints.
- **Extend Trainings:** Free, ongoing two-hour live professional learning sessions in specific technologies and instructional practices.
- **All training is active, collaborative, authentic, evidence-driven, and job-embedded** — aligned to best practices in adult learning and CTE professional development requirements.

Did you know?

Your SmartLab Regional Manager(s) can share funding resources available to you from the local to the federal level.

Key Talking Points for CTE Budget Conversations

Use these talking points when presenting SmartLab to CTE directors, curriculum coordinators, superintendents, and school board members responsible for Perkins V allocations. These key messages highlight how SmartLab aligns with Career and Technical Education priorities, supports workforce readiness goals, and delivers measurable value across the full K-12 learning continuum.

Whether the conversation is focused on funding, program implementation, student outcomes, or long-term sustainability, these points can help stakeholders understand why SmartLab is a strategic investment in future-ready learning.

Key Talking Points
SmartLab is a complete CTE program, not just equipment. Many schools use Perkins V funds to purchase tools and equipment that sit underused because there is no curriculum, no trained teacher, and no supportive environment around them. SmartLab solves this by delivering all five ecosystem components together. You are not buying a lab — you are launching a program.
SmartLab builds measurable career readiness from day one. From the first project, learners are positioned in career roles — as engineers, coders, scientists, and media producers. The curriculum is designed to develop not just technical skills, but the STEM identity and problem-solving disposition that employers and higher education institutions are seeking.
SmartLab scales across grade levels. Unlike programs that serve only high school CTE students, SmartLab supports K-12 implementation. This means CTE funding can be used to build a career-connected learning pipeline that begins in elementary school and prepares students for high school CTE pathways and post-secondary success.
SmartLab is designed for sustainability. The Certified Facilitator program, annual support partnership, and ongoing professional learning ensure that your CTE investment does not depreciate after year one. SmartLab is built to grow and improve over time, which aligns with Perkins V's emphasis on continuous improvement and program accountability.
SmartLab produces evidence you can use. From standards-aligned project documentation to ISTE Seal certification to Johns Hopkins efficacy research, SmartLab provides the documentation you need to report program quality, justify continued investment, and demonstrate outcomes to your community and state CTE office.

SmartLab Areas of Exploration and CTE Career Cluster Connections

The following table maps SmartLab's eight Areas of Exploration to relevant national CTE Career Clusters, supporting alignment documentation for state and local program approval.

SmartLab Areas of Exploration	Related CTE Career Clusters	Sample Career Connections
Circuitry (C)	Science, Technology, Engineering & Mathematics; Information Technology	Electrical engineer, electronics technician, IoT developer
Communication & Media Arts (CMA)	Arts, A/V Technology & Communications; Information Technology	Graphic designer, video producer, web developer, journalist
Environmental Technology (ET)	Science, Technology, Engineering & Mathematics; Agriculture, Food & Natural Resources	Environmental scientist, sustainability analyst, energy auditor
Manufacturing Technology (MT)	Manufacturing; Science, Technology, Engineering & Mathematics	Product designer, mechanical engineer, CAD/CAM technician, 3D fabrication specialist
Mechanics & Structures (MS)	Architecture & Construction; Manufacturing; STEM	Structural engineer, architect, construction manager, aerospace engineer
Robotics & Control Technology (RCT)	Science, Technology, Engineering & Mathematics; Manufacturing; Transportation	Robotics engineer, automation technician, drone operator, systems analyst
Scientific Data & Analysis (SDA)	Science, Technology, Engineering & Mathematics; Health Science; Agriculture	Data scientist, research analyst, GIS specialist, environmental monitor


Primary - Circuitry

Next Steps

SmartLab's team is experienced in supporting schools and districts through the CTE funding process.

We can help you:

- Review your state's Perkins V local plan requirements and identify where SmartLab aligns
- Develop budget justifications and narrative language for grant applications
- Connect with other SmartLab schools using CTE funding successfully
- Provide program documentation, standards maps, and efficacy evidence for your grant file
- Design a phased implementation plan that matches your funding timeline and budget

SmartLab exists to spark ah-HA! moments and build STEM identity for every learner.CTE funding exists to build a workforce-ready generation. These goals are not just compatible; they are mutually reinforcing.

Let's Talk

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Contact us today to learn about funding opportunities.
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