





STRATEGIC PLAN INTRODUCTION

PAsmart connects Pennsylvanians with resources to work, learn or train in the state.

Our businesses have openings and Pennsylvanians need jobs. PAsmart aims to help citizens get the skills they need, the way they like, for the jobs they want. Looking for jobs, choosing a career, or dealing with new work can be exciting and challenging. PAsmart makes it easy to learn about the tools and resources available to help you.



PAsmart

STRATEGIC PLANNING PROCESS

To ensure a cohesive and impactful approach to STEM and Computer Science education and career pathway programs across Pennsylvania, we conducted a **four-phase strategic planning process** designed to unify efforts, align priorities, and establish a shared vision for the future.

Phase 1: Establishing a Shared Understanding

We began by convening key leaders from the Pennsylvania Department of Education (PDE), the Pennsylvania Training and Technical Assistance Network (PaTTAN), and Intermediate Units responsible for leading statewide STEM and Computer Science education and career pathway programs. This phase focused on building a collective understanding of our current work, identifying common challenges, and recognizing opportunities for alignment across projects and programs.

Phase 2: Identifying Connection Points and Drafting Goals

Bringing stakeholders together in person, we facilitated cross-sector collaboration to map connections across our shared work. This phase allowed us to co-develop draft goals and focus areas that would unify our collective efforts. Through structured discussions, we identified key areas of impact and explored synergies between existing initiatives to maximize efficiency and effectiveness.

Phase 3: Refining Priorities and Strategies

In this phase, we worked together to refine the shared priorities, supporting activities, and strategic goals that would shape Pennsylvania's STEM and Computer Science education landscape. Through facilitated discussions and stakeholder input, we crafted a strategic framework that not only defined our collective vision but also outlined clear, actionable strategies to drive meaningful progress.

Phase 4: Stakeholder Feedback and Finalizing the Plan

With a preliminary plan in place, we engaged a broader network of stakeholders and partners to gather feedback, validate our priorities, and refine the strategies. This phase ensured that the final strategic plan was inclusive, responsive, and representative of the diverse needs of Pennsylvania's education ecosystem.

Our Commitment Moving Forward

This collaborative planning process reflects our commitment to fostering a unified, high-impact approach to STEM and Computer Science education. By leveraging the collective expertise of our partners, we have established a roadmap that strengthens workforce development, broadens access to high-quality STEM education, and positions Pennsylvania as a national leader in STEM and Computer Science learning opportunities. As we move forward, we remain dedicated to continuous collaboration, data-driven decision-making, and adaptive implementation to ensure that all learners in Pennsylvania have the opportunity to thrive in the evolving digital and STEM-driven economy.



PAsmart

STRATEGIC PLAN COMPONENTS

01

Core Priorities

that broaden participation in STEM/CS initiatives

02

Strategic Activities

that narrow the focus area of each priority and align efforts between projects

03

Theory of Change

to connect our work with the potential for statewide impact

04

Strategies

to enhance collaborative approaches between projects

05

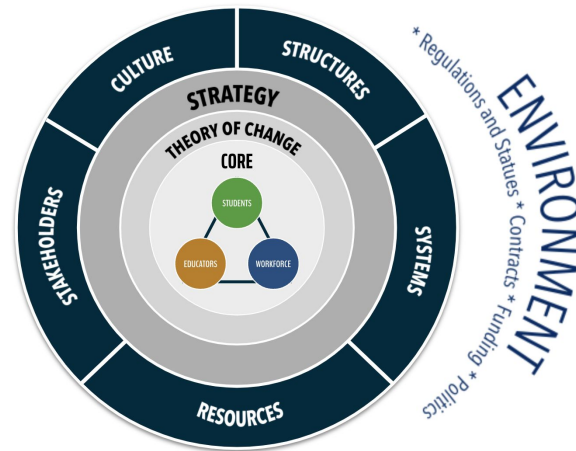
Organizational Elements

to understand the contributing factors that will influence our success

06

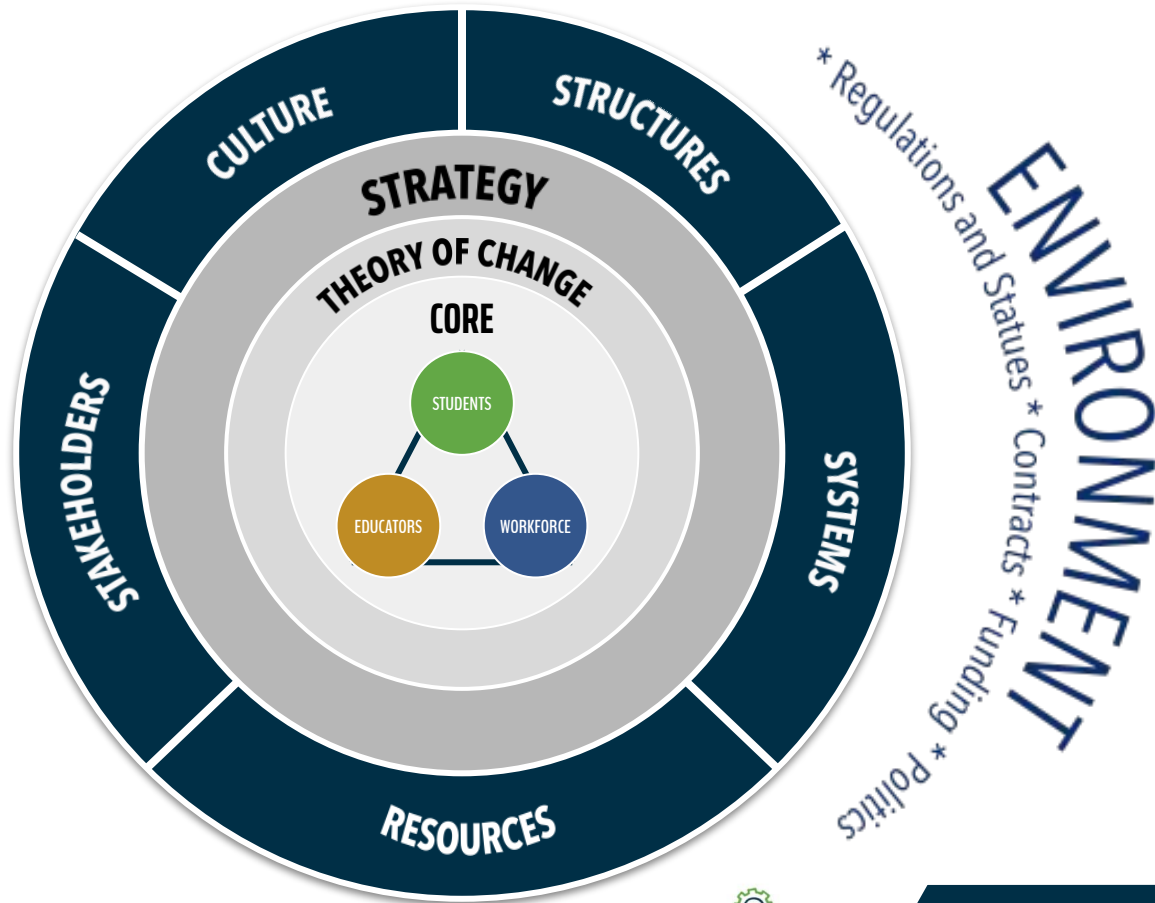
Goals & Metrics

to track the collective impact created across our shared work



The strategic plan components are organized around the Public Education Leadership Project (PELP) Coherence Framework.

The **Public Education Leadership Project (PELP) Coherence Framework** is a tool developed by Harvard University to help educational organizations align various elements to effectively implement improvement strategies that enhances student performance.



At the center of PAsmart's strategy is a commitment to improving STEM and Computer Science (CS) education for all learners. Our programmatic core is built on three **Core Priorities**.

STUDENTS

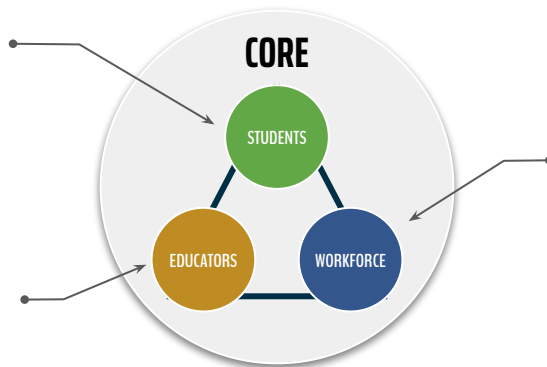
Increase and Broaden Student Participation in STEM/CS

Students & Caregivers play an active role in STEM/CS education by engaging in high-quality, hands-on learning experiences that foster curiosity, build confidence, and connect learning to real-world opportunities.

EDUCATORS

Increase and Broaden Educator Participation in STEM/CS Professional Learning Opportunities

Educators & School Leaders drive the implementation of STEM/CS initiatives by integrating student-centered instructional environments, participating in professional learning and resource sharing, and leading ongoing systems-level change.



WORKFORCE

Increase and Broaden Participation in STEM/CS Workforce-Connected Programs

Workforce Partners enable students to acquire and apply STEM/CS skills & knowledge as the foundation for future success by ensuring that all learners develop the competencies needed for academic achievement, workforce readiness, and active participation in an innovation-driven economy.

Within each of our three Core Priorities are **Strategic Activities** that narrow the focus area and enable alignment between different PAsmart projects.

STUDENTS



Student, Family and Caregivers Learning Experiences

Hosting events and educational opportunities that foster hands-on learning and active engagement.



Competitions and Challenges

Organizing and promoting academic and extracurricular competitions to stimulate student interest and achievement.



Student Leadership and Mentorship

Opportunities and programs that cultivate leadership skills and connect students to mentors.

EDUCATORS



Professional Development Experiences

Hosting events and providing opportunities for professionals to engage in continuous learning.



Communities of Practice and Learning Networks

Facilitating the creation of groups where professionals can share knowledge and collaborate.



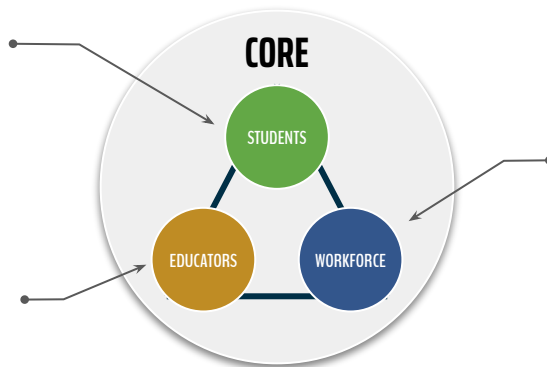
Resource Creation

Developing and distributing educational materials and resources to support educators.



Curriculum Support

Providing assistance and resources specifically focused on enhancing curriculum development and implementation.



WORKFORCE



Cross-Sector Experiences

Initiatives and events that bring together partners (education, industry, nonprofits, government, etc.) to foster collaboration.



Workplace-Based Programs

Short and long-term career exposure programs for students and educators (internships, apprenticeships, capstones, externships, etc.).



Collaborative Industry Networks

Establishing networks and ecosystems that connect professionals from various sectors to strengthen collaborations.

Our **Theory of Change** is centered on the belief that system-wide, high-impact interventions will transform STEM and CS education across Pennsylvania.

STUDENTS

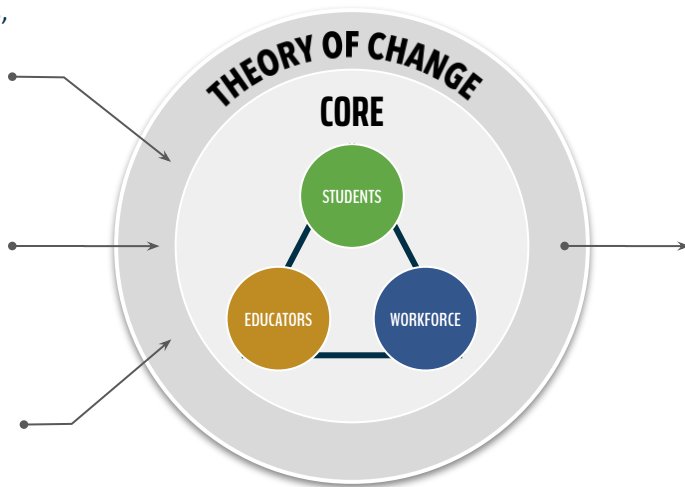
If we design and implement engaging, rigorous, and real-world STEM/CS learning experiences that are accessible to all students...

EDUCATORS

If we invest in educator professional development and leadership growth to build student-centered systems...

WORKFORCE

If we develop strategic partnerships across industry, higher education, and community organizations...



Then every student will:

- develop STEM/CS skills,
- gain confidence in applying their knowledge, and
- be better prepared to continuously learn and adapt

in the ever-evolving, STEM/CS-driven world of the 21st century.

PAsmart **Strategies** align statewide resources, policies, and programs to strengthen STEM and CS education through a coherent, scalable, and sustainable approach.

External Strategies *for PAsmart Projects*

Expand access to engaging, hands-on, and real-world **learning experiences** to build a robust STEM/CS **talent pipeline**

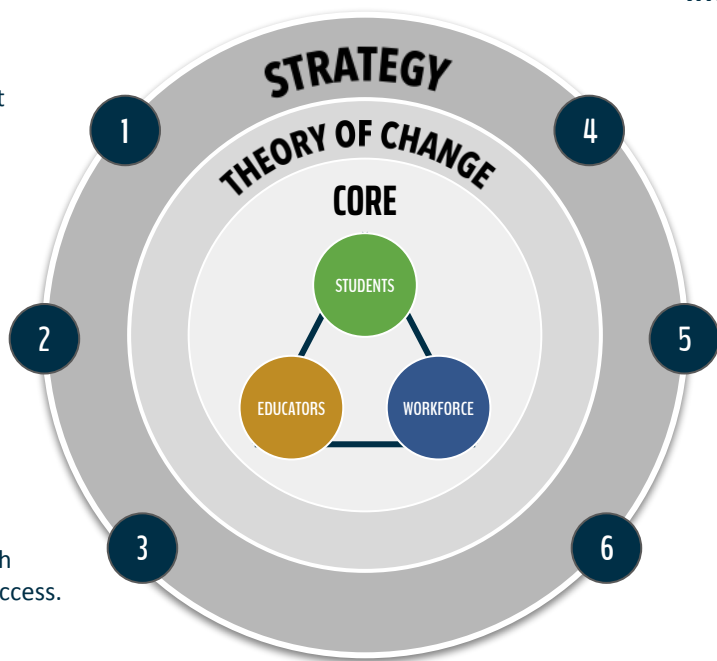
- Increase participation across all demographics
- Integrate real-world learning & pathways
- Celebrate success and continuous improvement

Strengthen **engagements and collaborations** that align education and workforce priorities to create seamless learning-to-career pathways.

- Elevate student and community voices
- Foster cross-project collaboration
- Strengthen partner engagement

Empower educators to drive **innovation and future-ready learning**, equipping all learners with skills, confidence, and adaptability for lifelong success.

- Enhance data-driven storytelling
- Build leadership capacity at all levels
- Spur systems-thinking approaches



Internal Strategies *for Core Leadership Team*

Implement **policy and funding strategies** that position STEM/CS as a statewide priority

- Ensure access across all demographics
- Advocate for policies that drive long-term impact
- Use data-driven insights to inform decisions

Strengthen **statewide structures and systems** for STEM/CS education

- Support LEAs, IUs, and ecosystems to implement, sustain, and scale initiatives
- Develop shared frameworks and best practices to ensure consistent implementation
- Foster regional and statewide collaboration

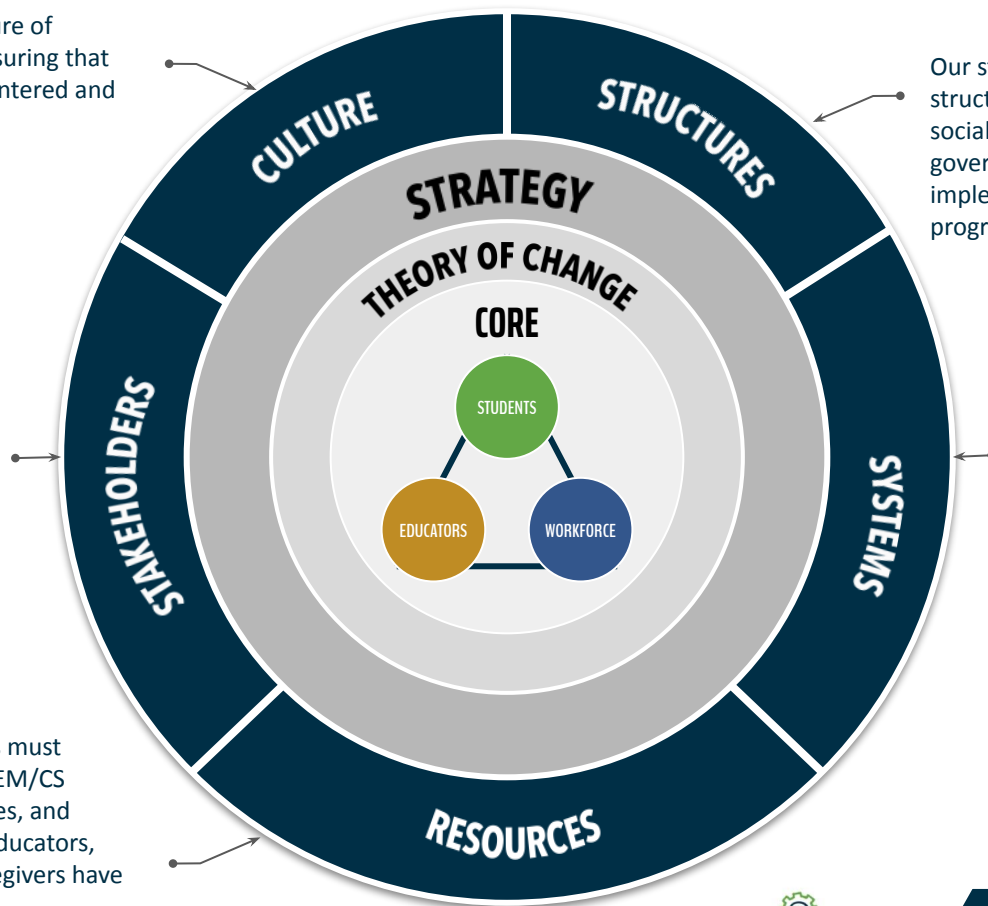
Advance **strategic storytelling and stakeholder engagement**

- Showcase collective impact through compelling storytelling and shared data
- Elevate student, educator, and industry voices
- Strengthen outreach efforts to position STEM/CS as a key workforce and economic driver

Our strategies must foster a culture of innovation and collaboration, ensuring that STEM/CS education is student-centered and continuously improving.

Our collective efforts must engage educators, students, policymakers, industry leaders, and communities to ensure STEM/CS initiatives reflect multiple perspectives and drive meaningful impact.

Our human and capital resources must expand access to high-quality STEM/CS learning experiences, technologies, and professional learning, ensuring educators, school leaders, students and caregivers have the tools to thrive.



Each of the Strategic Activities have corresponding **Goals and Metrics**.

STUDENTS



1A: Student, Family and Caregivers Learning Experiences

- Increase the Number of Engaging, High-Quality STEM/CS Learning Experiences for Students
- Increase Representation of Student Voice in STEM/CS from all Demographic Groups and across all IUs
- Increase Integration of Industry and Higher Ed Partners into Student Learning Experiences



1B: Competitions and Challenges

- Increase Participation in Streamlined STEM/CS Competitions and Challenges
- Increase Representation of Student Voice in STEM/CS from all Demographic Groups and across all IUs
- Increase Professional Learning Support for Advisors



1C: Student Leadership and Mentorship

- Increase Student Participation in Leadership and Mentorship Opportunities
- Increase Representation of Student Voice in STEM/CS from all Demographic Groups and across all PA CSO Regions
- Increase Perceived Effectiveness of Student Leadership and Mentorship from Adult Perspectives

EDUCATORS



2A: Professional Development Experiences

- Increase the Number of Educators Participating in STEM/CS Professional Learning Opportunities
- Increase Representation of Educators from all School Demographics and IUs in Professional Learning



2B: Communities of Practice and Learning Networks

- Strengthen and Expand STEM/CS Educator Networks and Communities of Practice
- Increase Collaboration Across Educators, Schools, and LEAs



2C: Resource Creation

- Increase the Availability and Accessibility of High-Quality STEM/CS Teaching Resources



2D: Curriculum Support

- Increase the Integration of STEM/CS into K-12 Curricula
- Strengthen Support for Educators in Adopting and Teaching STEM/CS Curriculum

WORKFORCE



3A: Cross-Sector Experiences

- Increase the Number and Impact of Cross-Sector STEM/CS Engagement Events
- Improve the Quality and Relevance of Cross-Sector Events to Career Pathways



3B: Workplace-Based Programs

- Increase the Number of Students Engaging in Workplace-Connected STEM/CS Programs
- Increase the Long-Term Career Readiness of Students Participating in Workplace Programs



3C: Collaborative Industry Networks

- Strengthen Collaboration Between Industry, Education, and Workforce Partners
- Align STEM/CS Education with Workforce Needs



Metrics for each Goal are found in this [Spreadsheet](#)



06 Goals and Metrics