



Pillars of Ford PAS

Ford PAS is dedicated to preparing all students to succeed as citizens and workers in the 21st century global economy. To achieve this success, high school students must engage in learning that develops and uses both knowledge and skills, and teachers must employ strategies that encourage the active, self-monitored learning that will yield these results. The hallmark of the Ford PAS approach is to integrate what and how students learn with what and how their teachers teach—because the two are inextricably linked. The “pillars” of Ford PAS are the key skills that students learn and the key teaching strategies that teachers employ throughout the curriculum.

Learning Pillars	Teaching Pillars
Critical thinking	Inquiry-based
Problem-solving	Project-based
Teamwork	Real-world (authentic)
Communication	Performance-based
	Technology integration

Learning Pillars: 21st Century Skills

The Ford PAS Learning Pillars correspond to the essential skills identified by the Partnership for 21st Century Skills, which brings together the business community, education leaders, and policymakers to define a powerful vision for 21st century education. These skills complement and support the knowledge and skills defined in national academic standards. Young people who acquire these skills are equipped to be lifelong learners in a rapidly changing, diverse, and technology-driven world.

Critical thinking: Ford PAS teaches students, and engages them in, the process of analyzing, synthesizing, and evaluating information. As they take part in this process, students learn how to make reasoned judgments based on evidence gained from observation, experience, reflection, reasoning, and dialogue. The curriculum encourages students to explore and take into account multiple perspectives and to develop habits of mind that support critical thinking, including curiosity, clarity, accuracy, thoroughness, fairness, open-mindedness, self-awareness, and persistence.

Problem-solving: Throughout the Ford PAS curriculum, students encounter authentic, open-ended problems that require them to clarify and analyze the situation, propose and explore alternative solutions, and implement and evaluate the results. They learn how to use a variety of problem-solving strategies and tools in different domains.

Teamwork: Ford PAS expects and encourages students to work together in teams to carry out investigations, synthesize data, and communicate results. The curriculum introduces students to a variety of skills—including giving and receiving feedback,

negotiating, and facilitating meetings—that build their capacity to collaborate effectively with their teammates.

Communication: Ford PAS builds students' capacity to understand and create effective oral, written, and multimedia communications for a wide range of purposes and audiences. Students learn strategies for comprehending and evaluating complex oral, text, graphic, and media communications. They also develop skills in communicating new ideas and crafting messages in a variety of forms and contexts.

Teaching Pillars: 21st Century Pedagogy

The Ford PAS Teaching Pillars represent the ways that the Ford PAS curriculum structures and guides students' learning of essential knowledge and skills. A feature of the 21st Century Skills that constitute the Ford PAS Learning Pillars is that students must engage in them in order to learn them. For example; students must actually work in teams in order to learn to collaborate successfully, and they must communicate in various formats and media, with various audiences, and for various purposes to become effective communicators. Telling students how to think critically, without their actually having the experience of analyzing, synthesizing, and evaluating information, will not enable them to become critical thinkers themselves. Likewise, simply reading about how others have identified and solved problems will not build students' capacity to clarify and seek solutions to problems they encounter in the real world. Yet students need access to strategies and tools that will help them develop these skills, and they need guidance and feedback as they gain expertise. Students also need contexts in which challenges and problems are structured to enable them to build on their existing knowledge and skills as they expand and deepen their understanding and develop facility with new skills. The Ford PAS Teaching Pillars provide contexts that scaffold and structure students' learning opportunities. These strategies, tools, and contexts constitute a 21st century pedagogy that helps teachers to facilitate student success.

Inquiry-based: Rather than starting with an introduction to facts, definitions, and terminology, Ford PAS modules begin by posing issues and problems and enabling students to acquire information and develop skills in the context of investigating those issues and problems, often through hands-on learning experiences. When additional information and skill development or practice exercises (called "Skill Resources") accompany the modules, they are included to support—not replace—the inquiry-based learning experiences.

Project-based: Ford PAS engages teams of students in carrying out in-depth, long-term investigations of significant questions and problems. Students' projects culminate in products and/or presentations through which they communicate about their investigations and their results. These products and presentations display evidence of the knowledge and skills students have acquired in the course of conducting their projects.

Real-world (authentic): Ford PAS grounds learning in the real world in a variety of ways. It allows students to experience how their classroom learning will enable them to

engage in future study and rewarding careers, and it uses business and manufacturing concepts as the contexts through which knowledge and skills are taught. Through the partnerships that are essential to the program, Ford PAS enables students to interact with people from business, higher education, and community organizations. Students venture onto college campuses, into businesses, and into the community as part of their learning experiences.

Performance-based: All Ford PAS activities identify specific learning goals that correlate with national academic standards. The curriculum requires students to apply the knowledge, skills, and understandings that they acquire through the modules' learning experiences to carry out long-term projects and create end products that demonstrate their learning. Modules provide a way of assessing each learning goal, using a variety of assessment tools—including product assessments, peer assessments, student self-assessments, quizzes, and tests. Quizzes and tests pose open-ended questions that often have more than one possible answer. When students answer these questions, they must make meaning of and articulate their new knowledge, rather than just recall and repeat facts.

Technology integration: Ford PAS equips students to use technology in the ways that people in business and professions use it: to conduct research, organize and analyze data, simulate complex systems, and communicate information and ideas. In addition, Ford PAS helps students become critical users of technology.