

Understanding the Federal R&D Engine



Federal education research is an engine of knowledge and progress that drives student success forward. It is not a set of isolated programs and investments, or a collection of parts, but interconnected blades on an engine. At the hub are the students and parents, educators, school and district leaders, and community partners who support students' success. When the blades spin in sync, it fuels student success across the system. The blades include:

Research

Research provides critical insights into both region-specific challenges and cross-cutting issues facing States, districts, and schools—such as recovering lost learning, personalizing instruction, integrating AI, addressing teacher shortages, and preparing students for modern workplace demands. It helps determine what works, for whom, and under what conditions. These insights inform strategic decisions and help leaders invest in approaches that drive meaningful, measurable improvement.

Data Systems and Tools

Data serves as the foundation of the Federal R&D system. It provides windows and insights into the current condition of education in the United States that enables responsive action and tells us what's working, where gaps remain, and which students need more support. Federal data systems and tools, while following data security protocols and protecting student privacy, allow for access to timely, high-quality data that teachers, school leaders and policymakers need to make adjustments to improve student outcomes.

Communication

Communication moves research and evidence into action. The Federal R&D system is uniquely positioned to fuel trusted, clear, timely translation of evidence into practice. By translating findings into accessible communication, sharing them through different channels, and supporting uptake, the Federal R&D system helps educators, districts, and States know what works and put it into action.

Innovation

Innovation is scaling what works based on evidence and impact, and promoting evidence-based, cutting-edge solutions that are likely to improve student outcomes. Innovation helps drive our education system forward, with the potential to make it more efficient, effective and responsive to the needs of students.

Evaluation

Evaluation tells us what's working, where there is room for improvement and how different approaches work (or don't) in different contexts. By showing how approaches succeed (or fail) in different contexts, evaluation ensures resources are spent wisely and changes lead to real impact for students.

Accountability

Federal data and reporting systems support honest reflection and public trust to ensure all aspects of our education system are fulfilling their purpose and can demonstrate results. They provide clear, comparable insights that help families make decisions and help leaders identify best practices.