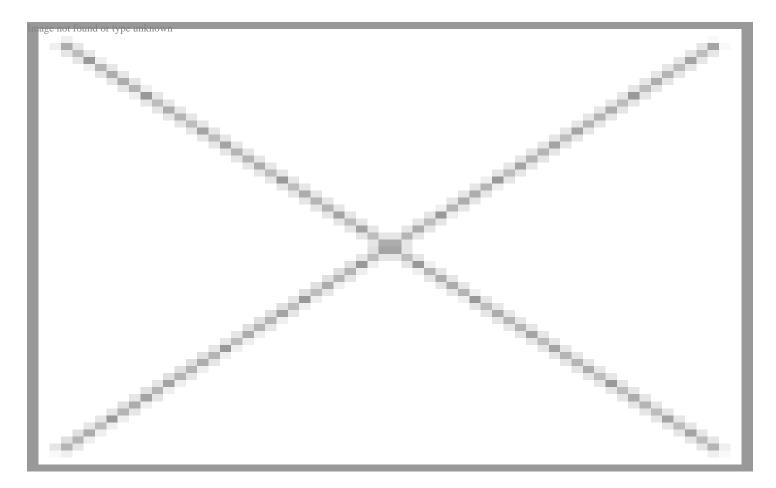


The reauthorized Elementary and Secondary Education Act, signed into law last week by the president, includes important education technology provisions. The Every Student Succeeds Act (ESSA) represents a significant devolution of power from the federal government to states and school districts while espousing a broader concept of what constitutes academic achievement. But will the removal of unwanted or unsuccessful tactics mandated by the U.S. Department of Education mean better solutions will replace them?

Under the ESSA, educational technology could spark a transformation of teaching and learning for the now empowered states and districts. The way the legislation facilitates the use of educational technology is summarized in the chart below.



## Edtech in the ESSA

A recent Gates Foundation study found that 56 percent of teachers surveyed believe digital tools make them

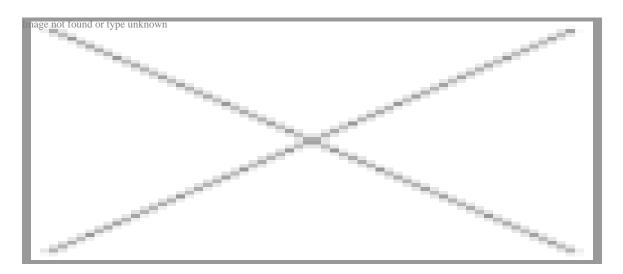
better teachers. The ESSA is attempting to push that percentage much higher.

Buried in Title IV of the bill is a significant new statutory authority for states and districts to pursue innovative educational technology (edtech) strategies. The Student Support and Academic Enrichment Grant program contains the opportunity for states and districts to fulfill the flexibility provided by the overall structure of the bill, as well as harness the emerging potential of edtech.

Edtech can be a game-changer for educators with even farther-reaching implications for educational institutions themselves. If developed and applied correctly, it could streamline time-consuming processes like lesson planning, reporting, and record-keeping, personalize learning, and simplify and improve communication.

Authorized at \$1.65 billion, this new grant program is funded through the repeal and consolidation of 49 other programs. The program is composed of three parts, one of which is ground-breaking in its support for the effective use of edtech by states and districts to improve the academic achievement of all students.

Up to 60 percent of the grant funds — almost \$900 million — can be used for innovative edtech strategies (importantly, though, no more than 15 percent can go toward technology infrastructure). This is approximately 4 percent of the overall authorized funding in the bill. The table below shows how, at the authorized level, funding under Title IV will be distributed, after accounting for various set-asides.



## Innovative Federal Policy is Not an Oxymoron

The edtech provisions in the ESSA recognize that there is a stubbornly persistent design flaw in the educational system: despite a variety of skill sets, interests, and backgrounds, going to school means studying the same content as everyone else — at the same pace.

Yet we've known for decades that personalized learning is a vastly better approach. A 1984 study led by education psychologist Benjamin Bloom found that students given one-on-one instruction consistently performed two standard deviations better than their peers in a regular classroom. That's enough to vault an average student to the top of the class.

Until recently, technology advancements that may have seemed far-fetched a decade earlier have made this

personalized approach possible. Indeed, venture funding in the edtech sector has increased from almost \$400 million six years ago to an expected \$2 billion this year.

Powerful, adaptive edtech means that all students can have — as part of their instructional team — a digital instructor to help them learn what they need to know, when they need to know it, at their own pace and place.

There is no excuse for doing things the old way, and federal legislation is trying to ensure the old way goes away. ESSA strongly encourages personalizing education, including through blended learning, as well as attempting to ensure more equitable access to technology and digital learning experiences. It also highlights blended learning as a practice that can help struggling students.

The bill contains definitions for important terms like "blended learning" and "digital learning," as well as more common terms like "technology." These definitions are important because federal, state, and local funding decisions will be made using them, which should bring more consistency and proficiency to how edtech is used.

In addition, the new provisions emphasize professional development in the use of edtech to enable teachers and instructional leaders to increase student achievement, as well as initial and ongoing professional development for teachers, principals, and other school leaders, involved in blended learning to support the implementation and academic success of the project.

A recent edtech survey found that 86 percent of respondents said that teachers in their district need more professional development; 41 percent said they don't believe their districts have an explicit plan that lays out for teachers how education technology is most effectively used in lessons and curriculum. ESSA overall, and in the specific language of the Student Support and Academic Enrichment Grant in Title IV, attempts to address these concerns from the field.

## Other Important ESSA Policy

*Funding* — Edtech can be supported through other federal education programs under current law. Title IV of ESSA adds to these other sources of funding, and could in fact be the leading edge of driving these additional resources — the key that unlocks the potential of these other programs to support edtech.

As detailed by the Lexington Institute, states, districts, and schools can fund edtech strategies and innovations, including personalized blended learning, through several of the most significant federal education programs – Title I and Individuals with Disabilities Education Act (IDEA) – as well as Title II and Title III. ESSA makes this arguably easier, because there is now a broader meaning of what achievement is and therefore what costs are allowable under the law.

The bill also makes important changes to the "supplement not supplant" and Title I "schoolwide" funding flexibility rules, making it easier for school leaders to use federal funds to help to procure innovative edtech to deliver a high-quality education to all children.

*Title I Set-Aside for "Direct Student Services"* — States may reserve up to 3 percent of their Title I allocations for "Direct Student Services." These are funds that the state can use to support districts that have been identified for improvement. The funding can be used to pay for a variety of activities, including personalized learning activities.

*Education Innovation and Research* – The bill reserves funds for an Education Innovation and Research authority (this is a new version of the current Investing in Innovation program – i3) that school districts and nonprofits can leverage for edtech and personalized learning research and development.

All of these definitions, provisions, and programs around edtech provide states and districts with additional funding and flexibility to use innovative edtech providers, solutions, and strategies.

# But Does EdTech Work?

In addition to Bloom's foundational research, there is an increasing amount of data that suggests edtech makes instruction in diverse classrooms more effective and efficient. In one survey, a large majority of math teachers reported that free instructional content from Khan Academy helped them challenge their most advanced students, and a smaller but still significant majority reported that it gave them extra capacity to help their most struggling students make gains. There are also a number of worthy contributions to the research base of personalized and blended learning from SRI International.

However, these positive results are not always reflected in edtech implementations. Although it uses data that are several years old, a study by the Organization for Economic Cooperation and Development (OECD) study raises the important question of why we are not seeing greater impact on academic achievement given the enormous potential of technology to assist teachers in diverse classrooms to personalize learning and increase student engagement?

This OECD report reflects the fact that edtech has too often been layered on top of the ineffective and inequitable education system we have now. However, the OECD indicates that we can't simply give in, and policy-makers must embrace edtech policies — like those in the ESSA — that:

- provide educators with learning environments that support 21st-century pedagogies and provide children with the 21st-century skills;
- expand access to content knowledge. Students shouldn't be limited to a textbook printed two years ago and designed 5+ years ago; edtech can provide the needed access to the world's best and most up-to-date content;
- support new teaching and learning that focuses on students as active participants with edtech tools and strategies to enhance deeper learning, including through effective communication and collaboration.

## Edtech is a Necessity, Not a Luxury

Currently, a large gap remains between the relatively modest impact that technology has had on education, particularly in grades K-12, and the transformative impact that technology has had on other parts of our lives.

The digitization of education content in interactive software has created the potential for personalized, adaptive learning. And with the digital infrastructure increasingly in place, such as through the FCC's revamped E-Rate program, powerful solutions that have the potential to transform the teaching and learning experience are coming of age. Advances in adaptive technology platforms mean that educators can personalize every student's education experience to accommodate the nuances of each student's learning needs.

Ultimately, we must learn from past experience to improve the effectiveness of future investments in

technology. Technology can amplify great teaching, but great technology cannot replace poor teaching. Properly implemented and fully leveraged by states and districts, the ESSA can help teachers become efficient and effective and student outcomes can be significantly improved.