



Using Federal Funding to Address Pandemic Interrupted Learning

Over the past year, we have seen a flurry of stimulus bills aimed at revitalizing the nation's private and public sectors. The three major bills passed during 2020 and 2021—CARES, H.R. 133, and American Rescue Plan (ARP)—all allocate funding for education. These bills represent a turning point in American education: Schools may finally have the funding they need to address both pandemic-related interrupted learning and longstanding issues predating COVID-19.

No amount of funding will fix all of our problems, but it will facilitate recovery and empower administrations to better serve teachers and students. Here, we'll cover the ins and outs of funding, so you'll know what to expect as the money rains down.

The CARES Act and H.R. 133

The CARES (Coronavirus Aid Relief and Economic Security) Act was the first pandemic-related bill to be passed. Passed in March 2020, CARES is oldest and smallest among its policy siblings, providing \$13.2 billion in education aid. H.R. 133 was passed in December 2020. The slice of stimulus-package pie that H.R. 133 sets aside for education includes \$54 billion in emergency funding for elementary and secondary schools and \$4 billion for the Governor's Relief Fund. (There is also \$22 billion for higher education.) The bill includes provisions that permit states and school districts to determine how the money will be spent. Like the CARES Act, H.R. 133 contains 15 categories of approved use of funding, and allows states and districts to decide which categories they will address.

One of the targets of CARES and H.R. 133 is interrupted learning. It is estimated that, overall, students have lost anywhere from a few months to years of learning. (We did a deep data dive in this [blog](#) and this [guide to the whole issue](#).) These bills are for all students, but they focus especially on disadvantaged students—who were already hurting before the pandemic and have been disproportionately affected. Category 12 allocates funding that specifically targets interrupted learning among low-income students, children with disabilities, English language learners (ELL), racial and ethnic minorities, students experiencing homelessness, and children in foster care. Again, the districts will determine how they want to address interrupted learning among these students. STEMscopes' summer school enrichment and interrupted learning support programs are, for example, appropriate applications of these funds.

Category 9 of CARES and H.R. 133 is also relevant to interrupted learning. It permits the purchase of direly needed resources, such as "hardware, software, and connectivity" (in other words, Wifi). This section is especially important for lower-income students, many of whom still lack the technology needed for distance learning. Moreover,

many of them live in urban areas where in-person learning is less likely to be offered. Getting computers and Wifi to these students is a pressing need in addressing interrupted learning. But to support the needs of students lacking internet connectivity, STEMscopes has taken an offline-access approach, enabling users in our 2021 summer update to use the curriculum without needing internet access.

Getting and using the funds

You may be wondering how the school districts are getting the money and who will decide how it will be used. For H.R. 133, the federal government will grant funding to each state's educational agency. The states are then required to allocate at least 90 percent of the funds to school districts, who will in turn decide how they spend the money. H.R. 133 funding will be available through September 30, 2023 and can be used for expenses dating back to March 13, 2020 when COVID-19 was declared a national emergency. Each district's allotment will be determined by student population: The more students a district has between the ages of 5 and 17, the more money it will receive.

To remain eligible for funding, states must submit a report to the federal government outlining how the money is being used in the districts. As mentioned earlier, states and districts will have to address certain education-related categories. They do not need to spend funding in every category, but one area they must address is interrupted learning among disadvantaged students. Needless to say, these students deserve our very best, and H.R. 133 will equip us to better serve them.

The American Rescue Plan

The American Rescue Plan (ARP) includes several categories of funding for public education. The largest portion of public education funding, \$350 billion, will go to states and local governments for discretionary spending, followed by \$130 billion for reopening K-12 schools safely and reversing interrupted learning. As of March 1, 2021, [most states](#) are giving local authorities the last word in reopening schools. Unfortunately, [studies](#) show a direct correlation between high degrees of interrupted learning and distance learning. Still, virtual learning isn't in itself necessarily the problem. Affluent school districts, for example, have the resources to ensure academic progress without meeting in person.

But even after a year of COVID-19, schools struggling before the pandemic still don't have the resources they need for virtual learning. Many students living in poverty don't have Wifi, computers, and other essential technology for distance learning. Reopening schools safely (with emphasis on "safely") is the surest way to curb interrupted learning. The \$130 billion

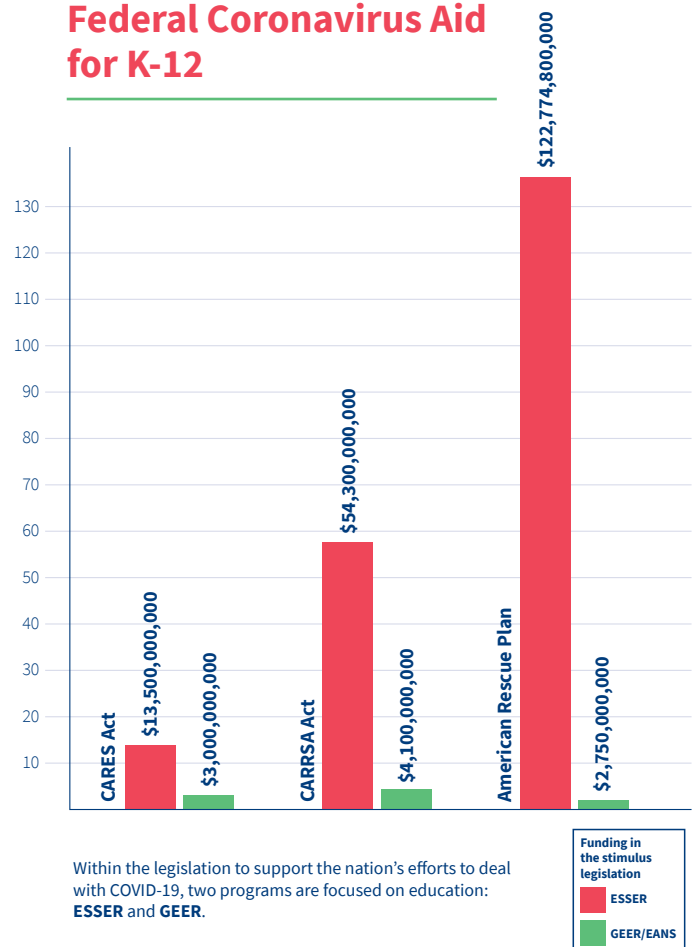
dedicated for this purpose can help us get there. (You can see a full breakdown of the funding [here](#).)

Tax Provisions

The American Rescue Plan will extend two important tax credits to more people in 2021: the Earned Income Tax Credit (EITC) and Child Tax Credit. The EITC pertains to low-income workers without children in their household, and the Child Tax Credit is a small sum granted to families with children. Ironically, in the past the tax credit has applied predominantly to middle-and upper-income families. Under the new provision, the credit will be granted for every child except those growing up in families occupying the highest income bracket. Low-income families will receive \$3,600 per child, a sum that will be paid in allotments throughout the year, guaranteeing some form of regular income. This tax credit will be an addition to the \$1,400 stimulus check that most Americans have received. Experts believe that the two credits (along with the stimulus checks) will raise 5.5 million students above the poverty line—a 40 percent improvement.

Experts have long believed that, for students living at or below

Federal Coronavirus Aid for K-12



the poverty line, [factors outside of school](#) largely contribute to bad academic performance. Drastic reform in the classroom does not necessarily have to occur (although most analysts would agree that certain changes need to be made). Rather, our policy should focus on improving the situation of students in their homes and neighborhoods. The tax provisions aim to achieve this outcome. However, they are not permanent: as of this writing, it is unclear how long they will last. Policy experts are predicting that they will be effective for at least a year or two, but as the economy recovers, it is possible that they will be withdrawn.

As educators, we recognize the wisdom of addressing poverty to improve children's prospects, even as we strive to help them in the classroom. Students cannot be expected to perform well on a math or biology test when they are grappling with food uncertainty or unsafe housing. For far too many students, this was their reality before the pandemic. As we all know, COVID-19 has only made things worse. The American Rescue Plan will help, but we must already begin planning for the future to ensure that these students are not once again forgotten when society regains its footing. As educators, we will hold on to the hope of lasting, positive change.

How will schools use H.R. 133 and the American Rescue Plan?

[H.R. 133](#) and the American Rescue Plan will give schools a major monetary boost this year. The two measures offer more funding to public education than any other in recent memory, revitalizing the education space. In previous blogs, we have looked at the categories that schools and districts must target with funding, but it is administrators who will largely determine which categories to address and how to address them. The broad leeway comes with great responsibility, of course. Decisions surrounding funding use will shape the future of education for years, and academic outcomes will be analyzed in light of those decisions.

This is the perfect time for educators to reflect on what has and hasn't worked over the years leading up to the pandemic. Fortunately, options for improving the learning process and school environment abound.

Scaffolding

As we've described above, one major focus will be [interrupted learning](#). Over the past year, educators and the general population have turned their attention to interrupted learning, but it is in fact a longstanding issue rooted in [social and racial inequity](#). Now is the time to establish methodologies that serve the full spectrum of students instead of a narrow segment.

[Scaffolding](#) is one such method. As the name implies, scaffolding entails providing various kinds of support for students as they learn new material. Support can take the form of picture vocabulary, reviews of fundamental concepts, visual aids, real-world connection activities, and many other techniques and tools. The variety and flexibility of scaffolding is, in fact, one of its strengths. Scaffolding is inherently adaptable to different learning needs because it is predicated on the understanding that each classroom includes a range of academic levels. This feature makes it a powerful tool for differentiation.

Benchmarks

To effectively scaffold, teachers must first identify their students' learning gaps. Benchmarks can help you do this by providing valuable data on student comprehension and performance. By purchasing benchmarking tools, schools and districts will have concrete data they can use to plan targeted lessons.

STEMscopes Science offers evidence-based benchmark assessments in the form of rigorous beginning-of-the-year and year-end benchmark tests, as well as numerous assessment-bank questions available anytime during the school year. STEMscopes data analytics allow teachers to quickly determine how to re-teach, accelerate, and flexibly group students.

STEMscopes Math offers three kinds of benchmarks: pre-assessment, mid-assessment, and post-assessment each with Quantile Scores. A pre-assessment benchmark measures students' grasp of standards from previous grades; mid-assessment evaluates their understanding of grade-level standards and those from previous grades; and post-assessment focuses on their comprehension of all grade-level standards and can be used as a predictor of student performance on state tests. The quantile benchmark evaluates students' mathematical performance, suggests the content the student is ready for, and tracks their progress as the teacher administers various assessments.

Summer Enrichment

Schools must target funding on pandemic interrupted learning and interrupted learning caused by inequity, both of which can be addressed through academic summer programs. Almost every scope (lesson) in both STEMscopes Math and STEMscopes Science is scaffolded. Moreover, the STEMscopes curriculum as a whole is an excellent resource for mitigating interrupted learning. One helpful feature in STEMscopes Math and STEMscopes Science, for example, is the addition of Intervention and Acceleration to Roger Bybee's traditional 5E model. Intervention is an opportunity for teachers to slow instruction down and give students time to digest new content. Intervention naturally complements high-dosage tutoring,

one of the most effective methods of mitigating interrupted learning, because it provides guidelines and resources for dynamic, interactive small-group instruction. To get a preview of small-group intervention and other aspects of our curriculum, head over to stemscopes.com/math and stemscopes.com/science.

Not every waking moment of summer school and summer vacation should be dedicated to interrupted learning. Students enjoy learning brand-new skills, and summer is the time to do just that. One valuable skill every student should be exposed to is computer programming. Programming is increasingly valued in the job market, and even if students show no interest in the programming professions, learning to code challenges and improves their analytical and technical abilities. [STEMscopes Coding](#) is a fun, interactive way to learn coding. Students master the fundamentals of Javascript by

creating and customizing digital apps that they can share with their friends.

Professional Learning

Teaching is one of the most important professions in the world. Period. Plus, it's one of the hardest jobs out there. With that in mind, it makes sense to provide all the resources teachers need to develop and hone their generation-defining craft. Now, under H.R. 133 and the American Rescue Plan, professional learning (PL) is an approved category of funding. Of course, there is no such thing as a one-size-fits-all professional learning program, which is why STEMscopes tailors [professional learning](#) to the needs of each school district.

We see professional learning as an exciting journey that leads to more students with a lifelong passion for STEM. The journey starts at a bird's eye level, with an assessment that

Charting a Pathway Forward

There are some big challenges ahead for everyone in education. It will take a concerted effort to address pandemic-related interrupted learning, interrupted learning stemming from inequity, and other challenges facing teachers. H.R. 133 and the American Rescue Plan will help us do just that. We can use this opportunity to re-evaluate our ways, keep what works, and fix what doesn't. This may be the beginning of a bright new era in American education.

