In schools across the country, December means more than the start of the holiday season. It’s when first semester classes come to an end. That means students taking tests and teachers winding down instruction as the calendar year comes to a close.

It’s also time to wind down analog-era education. The teaching tools so many of us knew in class years ago—from the blackboard to the bulky textbook—are no longer the only essential instruments of education.

We know this intuitively. That’s because broadband and connected devices are changing every aspect of our lives. So many social spaces are now virtual. Plus, the combined power of mobility and cloud computing means we can take content with us wherever we go.

All of this change simply does not stop at the school doors. So if we are smart, we will let it in, wrestle with its potential, and do good things. Because doing anything else will not prepare our students for the world they live in and will deny them the digital skills they need to compete.

The good news is we have E-Rate. We can use this program to help put classrooms and libraries across the country on course for digital age learning in the new year. But to do this, we need a better and bolder E-Rate for the future—what I call E-Rate 2.0.

E-Rate is the nation’s largest education technology program. It helps schools and libraries in every state, by supporting access to modern communications and the Internet.

E-Rate was launched nearly two decades ago, when the Internet was known as the Information Superhighway. The program was the bipartisan brainchild of Senator Jay Rockefeller, Senator Olympia Snowe, and then Congressman, now Senator Ed Markey.

Thanks to E-Rate, more than 95 percent of classrooms in this country are now connected to the Internet. While this sounds good, the challenge today is no longer connection—it’s capacity. Too many of our schools and libraries that rely on E-Rate—often in low-income and rural communities—access the Internet at speeds as low as 3 Megabits. That means too many schools are unable to offer high-definition streaming video, take advantage of the most innovative digital teaching tools, or provide modern science, technology, engineering, and math—STEM—instruction.

We can fix this. Here at the FCC, we started the process of upgrading the E-Rate program last Summer. We refocused it on broadband capacity and streamlined the application process. This was a good start. But to take this program to the next level and truly make it modern, we have to take a fresh look at its funding for the digital age.

The E-Rate program was capped sixteen years ago at $2.25 billion a year. That was a long time ago. It was when gas was a dollar a gallon. It was when the price of new home was 45 percent lower than it is today. That means E-Rate funding has not kept pace with inflation, cutting its purchasing power by billions. Think about that. At a time when digital skills are an essential part of preparing students for the modern economy, one of our most effective programs is frozen in the age of dial-up.

Today’s Order rights this wrong. It raises the E-Rate cap by $1.5 billion. That puts us on a course to have high-capacity broadband and Wi-Fi in all of our schools over the next five years.

We need to go for it—because the stakes are high. Other nations are now leading the way when it comes to bringing broadband to schools. South Korea has wired all of its schools with high-capacity broadband. So has Estonia, where there is a nationwide effort to teach students as young as seven years old how to write code. Uruguay has connected nearly all of its primary and secondary schools. China,
India, and Thailand are working on ways to bring one-to-one connected device learning to students through large scale purchasing at low cost. In so many ways, these countries are different than the United States. But they have students, like ours, who will be competing in a global economy—and there is no reason to let other nations outspend us, outeducate us, and outachieve us.

So before our students file out of their classrooms and head home for the holidays, today we make a choice. Today, we choose a future where all American kids have access to digital age learning, no matter who they are, where they live, or where they go to school. Today, we are bold. We put in place, at long last, E-Rate 2.0.

But that does not mean our job is done. Because going forward we need to recognize that expanding opportunity goes beyond the school doors. We can’t forget that in a world where students rely on online resources and digital content in the classroom, they also need access to broadband when they go home.

Today, roughly seven in ten teachers assign homework that requires access to broadband. But the FCC’s data suggest that almost one in three households do not subscribe to broadband services at any speed—for reasons such as the lack of affordability and lack of interest.

Think about these numbers. Where they overlap is what I call the Homework Gap. If you are a student in a household without broadband, just getting homework done is hard. Applying for a scholarship is challenging. While low-income families are adopting smartphones with Internet access at high rates, let me submit to you that a phone is just not how you want to research and type a paper, apply for jobs, or further your education.

A recent study by the Pew Research Center found that more than half of teachers in low-income communities said that their students’ lack of access to online resources at home presented a major challenge to integrating technology into their teaching. So not only are students who lack access at home struggling to keep up, their lack of access is holding our education system back. It means too many young people will go through school without fully developing the skills that give them a fair shot in the digital age.

The good news is that we can do something about it. In 1985, when most communications involved a cord and President Ronald Regan was in the White House, the FCC set up a program called Lifeline. Today, it supports telephone access in 14 million low-income households across the country. But just like E-Rate, it needs an update for the broadband era. Instead of having the program support only voice service, we should allow consumers to choose between applying the same support to either voice service or broadband service.

Doing so would modernize the Lifeline program—and also help address the Homework Gap. The Homework Gap is the cruelest part of the digital divide. But it is within our power to bridge it, help kids get their schoolwork done, and expand Internet access. So going forward, I hope my colleagues will work with me to close the Homework Gap. Because if we combine this effort with our work here on E-Rate, we are going to be able to turn a generation of students from digital consumers to digital creators. And as the parent of two school-aged digital natives, I think there would be nothing sweeter.

So this week—Computer Science Education Week—it starts. We put in place a bold vision for E-Rate 2.0. We put ourselves on track to bring big broadband to our schools and modernize our libraries. We put our students on course to develop the skills essential for them to compete in a global, digital economy. Amen. It’s time.

Finally, I want to acknowledge that tremendous work has gone into today’s decision. Thanks to the Wireline Competition Bureau for its efforts and to the Chairman for making this reform a priority. But most of all I want to thank the countless teachers and librarians I was able to visit with over the course of this effort in Alaska, Arkansas, California, Colorado and many more places in between. Today’s decision is for you, the students you work with, and the futures you help shape.