

**Prepared Remarks of Tom Wheeler  
Chairman, Federal Communications Commission  
National Digital Learning Day  
The Library of Congress  
February 5, 2014**

Thank you Governor Wise, not only for your introduction, but most especially for your leadership both when in office and now as president of the Alliance for Excellent Education. Thank you to the educators who are here and online for your dedication to our nation's most critical asset. And to my friend, Librarian of Congress Jim Billington, thank you for hosting this important event.

I also want to give you a “teaser” about someone you are going to hear from this afternoon: FCC Commissioner Jessica Rosenworcel. When we at the FCC go looking for counsel on E-Rate and education issues we go to Commissioner Rosenworcel who, for over a dozen years, has made this issue her passion. The E-Rate program is better off because of having a champion and a leader like Jessica Rosenworcel. I am her partner in the effort to bring 21<sup>st</sup> century connectivity to 21<sup>st</sup> century students.

The issues being discussed today are a BIG DEAL and are a top priority for me and our Commission. During my tenure as Chairman of the FCC there may be no bigger and more significant issue than making sure our schools and libraries are connected to high-speed broadband networks. That is why E-Rate modernization is at the top of my agenda and why I support President Obama's goal of connecting 99 percent of all students to high-speed broadband capacity in five years – or faster.

I was in this building almost 18 years ago to the day when President Clinton signed the Telecommunications Act of 1996, which enshrined the E-Rate into law. Thanks to the bipartisan leadership of Senators Jay Rockefeller, Olympia Snowe, and then-Representative, now Senator, Ed Markey, the powerful concept that Americans should help support bringing connectivity to schools and libraries became law.

We all forget how primitive things were 18 years ago. I was in the mobile phone business at the time and helped create ClassLink, a program that gave mobile phones and free airtime to teachers because, back then, there was no one more isolated than a teacher in the classroom (just consider that...). Only a few blocks from here at J.O. Wilson Elementary School, we experimented with taking that idea one step further by installing mobile phones attached to modems in a crude effort to connect the school to the Internet. It may have been crude, but it worked and we installed such kluges in schools across the country. I was here that historic day 18 years ago because those activities had galvanized the mobile industry to become a proponent of E-Rate. And while we're talking about people who made a difference

in that effort, we can't forget FCC Chairman Reed Hundt who, working with Vice President Al Gore, was the Clinton Administration's guiding light on what we now know as E-Rate.

Eighteen years ago, the idea of a student-accessible computer in the school building was a revolutionary concept. Many of you here were no doubt in school at that time and recall those realities. Thanks to E-Rate that rarity became commonplace and computers moved into classrooms. Now with the next generation of E-Rate we are harnessing innovation to put that power directly in front of the student.

Three technological changes have increased the need for bandwidth in our schools and libraries. First, inexpensive tablets turn the computer from something in the corner of the classroom (or in the computer lab down the hall), to something on each student's desk. Second, WiFi means connecting to the Internet is no longer a function of being close enough to the plug on the wall. Finally, the content on the Web has a richness and an up-to-dateness that is available to everyone, regardless of where they live or their economic circumstances.

Along with the great technological revolutions of two decades ago came another development: the Digital Divide. As my colleague Commissioner Mignon Clyburn has observed, "Broadband has the potential to be the great equalizer for our children." When we put tablets and notebooks on each student's desk we take a huge step towards vaulting the Digital Divide. Not only are students connecting to the educational assets that will help them grow, but also they are developing the computer-literacy tools necessary for 21<sup>st</sup> century jobs. When I was in school we took shop and home economics to develop the rudimentary skills for later life. Very few employees today can be successful without computer skills – and in connected schools students learn those skills daily at their desk. Last week I received a letter from 50 of America's leading corporate chiefs – from Meg Whitman to Michael Dell to Mark Zuckerberg – in which they described E-Rate as an essential tool for our nation's competitiveness.

While we talk a lot about the connected school, we cannot overemphasize the crucial role of the connected library. Public libraries have been part of the fabric of America since our country's founding. Thomas Jefferson, whose personal library was the founding collection of this great institution, described a library as, "a delivery room for the birth of ideas." Today libraries are also something Mr. Jefferson could never have imagined: the community on-ramp to the world of information (although perhaps I misspeak, he was after all Thomas Jefferson!).

In community after community the library is the only place where students can go after school for free Internet access to complete their assignments. Research has found that a majority of American school children go to the public library to do school work. And for many of those students, it is the only link to the Net outside of school. That is really important when over 75% of K-12 teachers are assigning Internet-

required homework. And during the summer, libraries are the only place for many students to go to continue their online exploration and learning. Libraries are also the only place where tens of millions of adult Americans can get access to the Internet for information on jobs, health care and government services.

The E-Rate is a program for schools and libraries. Or, let me put it another way: libraries and schools.

So what do we make of this 18<sup>th</sup> birthday of the E-Rate program? It is an interesting benchmark. At age 18 many students move to the next level of education. So it should be with E-Rate. It is time for E-Rate to graduate and move to the next phase of learning.

President Obama calls it ConnectED. Commissioner Rosenworcel has dubbed it “E-Rate 2.0.” I simply call it modernization of a great American asset.

The President has set the goal of, within five years, connecting 99 percent of America’s students to digital learning opportunities through high-speed broadband in their schools and libraries. I subscribe to that goal. Luckily, thanks to the leadership of Commissioner Clyburn, we are not starting from scratch. Last fall the FCC began a process to collect input on the modernization of the E-Rate. Over 1,400 comments were received, and the FCC has held literally hundreds of meetings with interested parties that have helped move the ball forward.

There are three principles that should guide us in the effort to modernize the E-Rate program. One, to focus on the priorities of the 21<sup>st</sup> century: high-speed connectivity to every school and library and throughout those institutions. Two, to update how we manage the program to make it easier and more productive for schools and libraries. And three, ensuring sufficient resources are made available to meet our modernization goals, starting with a \$2 billion down payment on the expansion of high-speed connections over the next two years, while still meeting expectations set by the 2014 program rules.

A little known fact about today’s E-Rate program is that only about half of the program’s funds go for broadband connectivity. Well less than half goes for the kind of 100 mbps and higher speeds necessary for today’s learning environment. In a 2013 national School Speed Test 72 percent of schools – that is nearly 40 million students – didn’t have the access speeds they needed.

I was recently at one middle school where the students told about how the network would crash if too many of them pushed “Enter” simultaneously. They told of having to walk around the room holding their tablets up until they got a WiFi signal. Catherine Sandoval, one of the leading lights in state utility commissions, told me how students in one California school had to be bussed to another school to take

the online core curriculum tests and how students in Beverly Hills were advantaged over students in less affluent schools because they were used to taking tests online whereas other students were not.

When 80 percent of teachers and administrators in schools participating in the E-Rate program say they do not have the bandwidth necessary to meet their educational needs, we have a problem that must be fixed. When roughly half the E-Rate schools access the Internet at speeds that are slower than what many Americans have in their homes – and try to serve hundreds of students (as opposed to the few users in any one home) – we have a crisis that undermines our nation’s future.

We cannot – we will not – let those statistics continue.

We also have a management challenge. The current E-Rate program is burdensome, slow, and not always focused on the right goals. As the managers of the program, the FCC must improve the speed and effectiveness with which E-Rate is run. We must cut through our own bureaucracy, listen to ideas from schools and libraries on how to streamline and improve the process, and find ways to update the management of the program – including practicing what we preach about using the power of the Internet.

In my experience as a businessman I have often found the biggest immediate opportunities are unlocked by first looking carefully at how to do better with what you already have. Should it be necessary to increase the permanent funding levels for the E-Rate program, we will do what is appropriate. Prudently, however, any program funding change must be preceded by an assessment of the use of current funds along with a fact-based analysis of the needs of the program to meet the goals to which we all ascribe. Such a review by the Office of Managing Director of the FCC, led by Jon Wilkins, has begun. By applying a business-like approach, we have identified opportunities for greater productivity within the program, including significant improvements to the way funds are deployed. It is these improvements, for example, that will play a major role in allowing us to double, to \$2 billion, the money to be spent on high-speed connections beginning this year.

So what does this mean exactly? Well, first, time is money. One thing we will begin to do immediately for Funding Year 2014 is to make sure that the applications that get the most students the most broadband get moving more quickly. And by “the most students” we don’t mean only those students in large metropolitan areas.

The current program, for instance, penalizes schools that apply jointly with other schools; because their applications are more complex, they often take longer to resolve. Henceforth they will be prioritized. We can start fixing that immediately. To those participating in the program let me be clear, we

will fund all Priority 1 services in 2014; but one of the first ways to accelerate progress is to get cash that is already in the program working to support broadband projects more quickly.

There's another advantage to consortia and other joint applications – they tend to get better prices for equipment and services by buying in bulk. This means that existing funds go farther. “E-Rate” was originally named to mean there should be a special “education rate” that would be affordable to schools. The more we can do to make sure that schools still get a true education rate for modern high-speed networks, the farther our existing funds will go.

Another way to use existing resources to devote additional funds to high-speed broadband is to improve the efficiency of how we treat old applications – appeals, holds, and other outstanding requests. In some cases, these processes have simply been too slow, with the result that hundreds of millions of dollars that could have been funding broadband is instead tied up in reserve accounts. We will get to work immediately to get those funds moving.

Everything I just described can begin immediately, starting with the applications in the FY 2014 program that are coming in now and will be completed by the end of March. Under the existing rules we will use improved management and oversight to accelerate the use of funds to enable high-speed connectivity for our schools and libraries. We believe these immediate common sense steps can double the funding of high-speed broadband over the next two years.

Simultaneously with these steps I am going to propose to my fellow Commissioners that we move forward with fundamental structural and administrative changes by issuing an Order later this spring, the results of which would go into effect in 2015. The intent is not to tear down the existing program and start over. Nor is the plan to just provide more money without restructuring the program so that it is designed to best meet the goals we all share. Rather, we should restructure the program in a way that results in a process that effectively targets high capacity connections to all libraries and schools and to provide resources to make sure high-speed WiFi delivers that connectivity within the classroom and library.

The next concrete step will be the release of a Public Notice in the coming weeks seeking comment on a targeted set of issues. It is premature of me to suggest any details, but it is safe to assume there will be an emphasis on how to appropriately phase out legacy services, including low-bandwidth connections, and reprioritize on broadband. My goal is to have this process completed before students return to classrooms in the fall.

It was an exciting day at the Library of Congress 18 years ago. Yet few of us imagined how 18 years later the Internet would affect every corner of our lives. We here today are likewise unable to predict the future – but we can build the pathway to that future, beginning with 21<sup>st</sup> century education tools for 21<sup>st</sup> century students.