

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Modernizing the E-Rate Program For Schools and Libraries	)	WC Docket No. 13-184
	)	
	)	

**COMMENTS OF THE  
LEADING EDUCATION BY ADVANCING DIGITAL  
(LEAD) COMMISSION**

Lee Bollinger  
James Coulter  
Margaret Spellings  
James Steyer  
*LEAD Commission Co-Chairs*

September 16, 2013

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

---

In the Matter of	)	
	)	
Modernizing the E-Rate Program For Schools and Libraries	)	WC Docket No. 13-184
	)	
	)	

---

**COMMENTS OF THE LEAD COMMISSION**

The Leading Education by Advancing Digital (“LEAD”) Commission respectfully submits these comments in response to the July 23, 2013 Notice of Proposed Rulemaking (“NPRM”) in the above-captioned proceeding.

**I. INTRODUCTION**

The LEAD Commission applauds the Federal Communications Commission (“FCC” or “Commission”) for its leadership in undertaking this critical effort to modernize the nearly 20-year old E-Rate program to reflect today’s schools and technology. LEAD appreciates the

appreciates the opportunity to participate in this proceeding to ensure that our students have the best education possible and are equipped with the skills necessary to compete in today's global economy. One essential element is the deployment of high-speed broadband infrastructure in schools and classrooms to enable the tools of 21<sup>st</sup> century technology to work to their full potential so that American students can reach their full potential. The E-Rate program is the key.

**A. Interest of the Bipartisan LEAD Commission**

The bipartisan LEAD Commission was formed in March, 2012, in response to a challenge from the FCC and the Department of Education to figure out why the adoption of education technology is happening so slowly in the United States and, more important, to create a national roadmap to advance digital learning across the country. The LEAD Commission is co-chaired by: Lee Bollinger, President of Columbia University; James Coulter, co-founder of TPG Capital; Margaret Spellings, former U.S. Secretary of Education; and James Steyer, founder and CEO of Common Sense Media.

Over the past 18 months, the LEAD Commission has conducted extensive research, interviewed and collaborated with more than 300 global thought leaders in the education technology field, polled more than 1,600 parents and teachers of K-12 students, and held high-level conferences on both U.S. coasts. Last week, the LEAD Commission released a Report detailing its research findings, analysis, and recommendations. The LEAD Report, *Paving a Path Forward for Digital Learning in the United States*, is submitted with these Comments and incorporated by reference.<sup>1</sup> The Report follows up on a five-point Blueprint released earlier in

---

<sup>1</sup> LEAD Commission, *Paving a Path Forward for Digital Learning in the United States* (Sept. 2013) ("LEAD Report"), at [http://www.leadcommission.org/sites/default/files/LEADComm\\_PavingPath\\_Report\\_091013a\\_highres%281%29.pdf](http://www.leadcommission.org/sites/default/files/LEADComm_PavingPath_Report_091013a_highres%281%29.pdf).

the summer.<sup>2</sup> LEAD Commissioners Margaret Spellings and James Steyer were proud to present its recommendations for advancing digital learning at the open Commission meeting on July 19, 2013.<sup>3</sup> LEAD's work identifies the barriers to digital learning and outlines the path forward towards meeting the challenge of providing American students with state-of-the-art education through the transformational power of technology.

## **B. The E-Rate Program Has Connected Schools But Needs To Increase Capacity**

Fortunately, due to the far-sighted work in 1996 of the Congress, the Administration, and the FCC, our country already has a program that has laid a foundation for connecting classrooms to advanced communications networks. The E-Rate program is one of the best success stories resulting from bipartisan efforts of Congress and the FCC. E-Rate has brought Internet connectivity to schools and libraries across the country – including in rural and urban areas, public and private schools, and in under-served communities. Today, however, we face a critical issue of insufficient capacity, not access. The program is long overdue for an update.

There is broad, bipartisan agreement on the goal of improving high-speed Internet access in classrooms across the country to as many students as possible, in the shortest time, and at the

---

<sup>2</sup> LEAD Commission, *LEAD's National Education Technology Initiative – A Five-Point Plan* (June 2013) (“LEAD Blueprint”), at <http://www.leadcommission.org/sites/default/files/LEAD%20Commission%20Blueprint.pdf>.

<sup>3</sup> LEAD Commission Remarks before the FCC Open Commission Meeting (July 19, 2013), at [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2013/db0719/DOC-322281A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0719/DOC-322281A1.pdf).

lowest cost possible.<sup>4</sup> Indeed, each sitting FCC Commissioner has acknowledged the growing need to modernize the E-Rate program.<sup>5</sup>

Moreover, there is broad public support for investing in education technology. A recent LEAD Commission poll of more than 1,600 parents and teachers of K-12 students found that 96 percent of teachers and 92 percent of parents believe that schools' integration of technology in teaching and learning is important to the education of American students today. The same poll

---

<sup>4</sup> See, e.g., Statement from President Barack Obama, "Statement by the President on the FCC Vote to Modernize the E-Rate" (July 19, 2013) ("Our ConnectED initiative – which has widespread support from Republicans, Democrats, educators, business and tech leaders and state and local officials – will ensure that the federal government can provide schools with the infrastructure and tools they need to deliver this competitive digital education for every student in the United States. That is the process that the FCC began today, and we look forward to the next steps in this effort as we move closer to our goal of getting 99 percent of America's students connected to the Internet through high-speed broadband and high-speed wireless within 5 years."), at [www.whitehouse.gov/the-press-office/2013/07/19/statement-president-fcc-vote-modernize-e-rate](http://www.whitehouse.gov/the-press-office/2013/07/19/statement-president-fcc-vote-modernize-e-rate); Statement from Chairman Jay Rockefeller (D-W.V.), Hearing of the U.S. Senate Committee on Commerce, Science, and Transportation, *E-Rate 2.0: Connecting Every Child to the Transformative Power of Technology* (July 17, 2013) ("With the right investments in high capacity, high-speed Internet connections, we can expand E-Rate so that it will be able to provide future generations of children the opportunity to compete in an increasingly interconnected and data-driven world. There's no doubt in my mind that E-Rate is the program that is giving more students a brighter future – one that we absolutely know is within reach."), at [www.commerce.senate.gov](http://www.commerce.senate.gov); Statement from Ranking Member John Thune (R-S.D.), Hearing of the U.S. Senate Committee on Commerce, Science, and Transportation, *E-Rate 2.0: Connecting Every Child to the Transformative Power of Technology* (July 17, 2013) ("E-rate is nearly two decades old, and like many of our communications laws, it could better reflect today's digital reality. Like [the Chairman], I am pleased the FCC plans to move forward on Friday with a rulemaking to begin the modernization of E-rate."), at [www.commerce.senate.gov](http://www.commerce.senate.gov).

<sup>5</sup> *Statement of Acting Chairwoman Mignon L. Clyburn Re: Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184 (July 19, 2013) ("We are not where we need to be relative to other nations and to the rate of technology adoption in this nation. And one of the biggest obstacles to seizing the opportunities of digital learning in America is inadequate bandwidth at our schools and libraries. Simply put, they need faster high-capacity connections and they need them now."), at [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2013/db0719/DOC-322284A2.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0719/DOC-322284A2.pdf); Remarks of Commissioner Jessica Rosenworcel, *Washington Education Technology Policy Summit* (Apr. 11, 2013) ("It is time for E-Rate 2.0. We need to protect what we have already done, build on it, and put this program on a course to provide higher speeds and greater opportunities in the days ahead."), at [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2013/db0411/DOC-320122A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0411/DOC-320122A1.pdf); Remarks of Commissioner Ajit Pai, *Connecting the American Classroom: A Student Centered E-Rate Program* (July 16, 2013) ("Today, too many kids walk off the school bus, only to walk decades into the past. This is unacceptable."), at <http://www.fcc.gov/document/commissioner-pai-speech-student-centered-e-rate-program>.

found that 95 percent of teachers and 91 percent of parents strongly support additional investments in technology by local districts, states and the federal government.<sup>6</sup>

As the LEAD Commission found in its extensive research, faster broadband, combined with more powerful devices and innovative digital content, can transform education and help bridge the digital divide. The FCC's proceeding to thoroughly review and modernize E-Rate can help usher in an era of innovation into every American classroom, so we can use technology to its fullest potential and to deliver more personalized instruction to meet each student's needs.

## **II. LEAD RECOMMENDATIONS FOR DIGITAL LEARNING & E-RATE MODERNIZATION**

### **A. LEAD Report and Five-Point Blueprint for Digital Learning**

The LEAD Commission believes that America's goal must first and foremost be to educate our children to the highest standard. With affordable education technology at our fingertips, the deployment of digital learning is imperative for our children and, in turn, our country. From communication to transportation, technology is constantly transforming and improving our lives, yet it plays a minor role in the U.S. K-12 education system. Meanwhile, the international community is rapidly deploying education technology, much of which comes from U.S.-based companies.

The LEAD Commission has set forth a five-point Blueprint with specific actions to accelerate the equitable adoption of digital learning across American schools and improve student outcomes:<sup>7</sup>

---

<sup>6</sup>LEAD Report, *supra* note 1, at 7 (citing Hart Research Assocs., *Parents' and Teachers' Attitudes and Opinions on Technology in Education*, quantitative research conducted in August 2012 for the LEAD Commission).

<sup>7</sup> *Id.* at 3.

1. Solve the infrastructure challenge by updating the wiring of our schools with high-speed broadband;
2. Build a national effort to deploy digital learning devices in the hands of all students by 2020;
3. Accelerate the adoption of digital curriculum and encourage continued innovation;
4. Embrace and encourage model schools;
5. Invest in human capital to train our teachers.

Five years ago, LEAD's Blueprint for digital learning would have been prohibitively expensive with \$1,000 workstations, shrink-wrapped sub-par software, and torn-up walls to wire school buildings. Today, the plummeting costs of laptops, tablets, and other digital learning devices, as well as innovative cloud-based software and enterprise Wi-Fi technology, allow for this initiative to be affordable and achievable.

According to the LEAD Commission's research, innovations in technology have lowered the cost of wiring each K-12 school by approximately 44 percent and reduced the cost of equipping each student with a device and the required connectivity by approximately 75 percent compared to five years ago.<sup>8</sup>

Delivering each of these five Blueprint items is critical but nothing can work without upgrading existing infrastructure to meet the needs and the opportunities of 21<sup>st</sup> century technology. No company buys IT as it would in 1996. Neither should our schools.

**B. Current Infrastructure is Inadequate and Does Not Provide Sufficient High-Speed Internet Access in the Classroom**

---

<sup>8</sup> *Id.* at 5.

As the LEAD Report details, the most immediate and expensive barrier to implementing technology in education is inadequate infrastructure, including high-speed Internet connectivity and suitable Internet-enabled devices. Progress is challenged in part by the bandwidth and resource crunch that bottlenecks many schools. These limitations have a direct impact on classroom learning.<sup>9</sup>

While today's schools are wired, they generally do not have the bandwidth needed to meet the demands of 21<sup>st</sup> century learning. According to FCC and EducationSuperHighway data, 80 percent of K-12 schools report that they do not have sufficient broadband and 83 percent say that they have outdated Wi-Fi networks.<sup>10</sup>

To remedy these inadequacies, the State Education Technology Directors Association (SETDA) estimates that schools will require 100 Mbps of bandwidth for every 1,000 students/staff members by the 2014-2015 school year.<sup>11</sup> Yet in 2010, only 10 percent of schools were equipped with bandwidth of 100 Mbps or higher.<sup>12</sup> By 2017-2018, the required bandwidth increases to 1 Gbps.<sup>13</sup> It is clear that unless we address schools' infrastructure barriers, little can be done to fully modernize our classrooms.

### **C. Goals for the FCC E-Rate Modernization Proceeding**

---

<sup>9</sup> See generally LEAD Report, *supra* note 1, at 9.

<sup>10</sup> FCC News Release, *FCC Releases data from E-Rate program and broadband usage survey* (Jan. 6, 2011) at <http://www.fcc.gov/document/fcc-releases-data-e-rate-program-and-broadband-usage-survey%20;EducationSuperHighway,InternetInfrastructureforAmericasK-12Students> (2012).

<sup>11</sup> State Education Technology Directors Association (SETDA), *The Broadband Imperative: Recommendations to Address K-12 Education Infrastructure Needs* (2012).

<sup>12</sup> *Id.* (citing FCC News Release, *FCC Releases data from E-Rate program and broadband usage survey* (Jan. 6, 2011), at <http://www.fcc.gov/document/fcc-releases-data-e-rate-program-and-broadband-usage-survey%20>).

<sup>13</sup> State Education Technology Directors Association (SETDA), *The Broadband Imperative: Recommendations to Address K-12 Education Infrastructure Needs* (2012).

The E-Rate program should be updated to reflect the realities and needs of kids and schools today. The Commission correctly asked a broad set of questions and should consider all options and ideas for modernizing the E-Rate program received through the initial comment period.

Several key goals are important to this rulemaking process:

- Modernization of the E-Rate program should be aligned with today's technology, focusing on high-speed bandwidth.
- The rulemaking should focus on supporting next generation models such as online and blended learning.
- The program should be simplified to make it easier for school districts to access E-Rate funds.
- It should be updated to align with current reform efforts in education.
- It should better connect to other technology efforts at the state and local level in order to leverage other efforts and build a cohesive system.
- The program should increase price transparency and provide incentives to purchase bandwidth more efficiently.

By reviewing how E-Rate funds are currently used and how they could be better utilized in the future, the FCC has an opportunity to reinvent the current program more strategically targeted towards the needs of today's teachers and students. By updating the program, E-Rate can provide the funding necessary to migrate our schools from the current inadequate bandwidth to high-speed broadband in a timely, efficient manner. Working with states, localities and the private sector, the federal government is uniquely positioned to catalyze efforts to start building the necessary infrastructure in schools.

### **III. CONCLUSION**

Long-term American competitiveness requires putting 21<sup>st</sup> century technology in the hands of our students and teachers. The LEAD Commission strongly supports modernizing the E-Rate program for schools and libraries. We hope this proceeding will inform the FCC on the need and the pathway to deliver the highest bandwidth to the most students at the lowest cost, and in the shortest amount of time.

To meet the 1996 Congressional mandate, the FCC should revise the program to assure that all students have the tools of modern communications technology in their classrooms. Although the comments here stress the infrastructure recommendations from the LEAD Blueprint and Report, the LEAD Commission looks forward to working closely with the FCC and all commenters in this proceeding on advancing other priorities and maintaining an open mind on all the proposals to modernize the E-Rate program and enhance high-speed connectivity of American schools in the most efficient way possible. The LEAD Commission will review the comments in this proceeding through the lens of the extensive research that laid the foundation for its Report. But of this, we are already certain: American leadership today in the global economy owes a significant debt to decisions made generations before to invest in providing world-leading educational opportunities. The cost of not doing so in this generation, for the benefit of future generations to come, is far too expensive.

We are facing a transformative opportunity in K-12 education. We simply cannot afford not to take bold steps to modernize E-Rate. The Commission should focus on delivering adequate bandwidth not just for the next semester – but for the next generation.

Respectfully Submitted,

---

Lee Bollinger  
James Coulter  
Margaret Spellings  
James Steyer

*LEAD Commission Co-Chairs*

Attachment