



September 16, 2013

Ms. Marlene H. Dortch
Commission Secretary
Office of the Secretary
Federal Communications Commission
Washington, DC 20554

**Comment for Proposed Rulemaking
Modernizing the E-Rate Program for Schools and Libraries**

WC Docket No. 13-184

Dear Members of the Federal Communications Commission:

I am writing in response to your request for comments about modernizing the E-Rate program for schools and libraries. ACT is an independent, not-for-profit organization that provides a broad array of assessments, research, information, and program management solutions in the areas of education and workforce development.

I commend the Federal Communications Commission (FCC) for its tremendous progress nationwide since 1996 at bringing schools and libraries, particularly in rural and high cost areas, into a new era of broadband connectivity. When the E-Rate program started, only 14 percent of the nation's K–12 classrooms had access to the Internet. Today, virtually all schools and libraries have basic Internet access. School and library connections to the Internet have significantly improved learning, broadened instructional options, and expanded access to a world of information for U.S. citizens.

ACT's comments on modernizing the E-Rate program are based on years of experience working with states and school districts to help all individuals achieve education and workplace success. Our comments focus on three issues that we believe should be considered in your efforts to modernize the E-Rate program: (1) the urgency to accommodate the accelerating demand for high-capacity broadband connections at the classroom level to meet impending educational system needs; (2) increases in the minimum technical requirements necessary for high-capacity broadband access; and (3) the anticipation of growth to accommodate a rapidly expanding demand for online instruction. These three issues are discussed in detail below.

Urgency of E-Rate Modernization

Next-generation models of learning and assessment in K–12 education need a “next-generation E-Rate” that can adequately support current and future education reforms. There are already new computer-based assessment systems being developed to measure student achievement (grades 3 – 8, and high school) following the development, adoption, and implementation of the Common Core State Standards (CCSS) in 45 states. State officials are rightly concerned that, without a broadband upgrade, a majority of schools across the country will not be able to participate in these online assessments, which will offer students more interactive opportunities to demonstrate their skills and will provide teachers and parents with faster test results. Moreover, nonparticipation could disrupt school accountability and teacher evaluation reforms being implemented in the states.

ACT's own work underscores the urgency of accelerating access to high-capacity broadband connections. Our next-generation assessment system (named "Aspire") will measure student progress—starting in elementary school and through high school—towards the attainment of academic content knowledge, goals, and behaviors necessary for success in college and careers after high school graduation. The Aspire system will be delivered online, will align to the CCSS, and be ready for states use next spring 2014. It will, like other state consortia systems in development, require increased broadband connectivity to successfully deliver.

New Requirements for Broadband Capacity

The FCC anticipated the increased demand for broadband connectivity in K–12 education in its 2010 *National Broadband Plan: Connecting America*. That report was the first to target a goal of 1 Gbps connections to community anchor institutions such as schools and libraries. That target is echoed by the State Educational Technology Directors Association (SEDTA)'s 2012 report recommending minimum bandwidth targets between now and the 2017–2018 school year for the enhanced teaching and learning being implemented by states. SEDTA recommends a minimum external Internet connection to the Internet Service Provider of at least 100 Mbps per 1,000 students/staff by the 2014–2015 school year, and a connection capacity of at least 1 Gbps per 1,000 students/staff by the 2017–2018 school year.

ACT, in partnership with its online platform developer Pearson, estimates that the minimum network speed necessary to implement its new online assessment systems will be at least **100 Mbps at school and at least 10 Kbps per simultaneously tested student** for both PC/Windows and Mac operating systems. These estimates align with similar technology specifications developed by the state assessment consortia. However, they are minimum estimates and likely to increase as technology continues to change and new needs emerge.

Given these technical requirements, the current shortfall in broadband capacity is alarming. The Partnership for Assessment of Readiness for College and Careers consortia has compiled state survey data indicating that 42% of states are not ready to implement the minimum framework of their online assessments, and only 27% are ready to implement rich assessment systems that measure higher-order cognitive skills, performance-based testing, or project work. And, as we noted, these large-scale educational assessment systems are scheduled to come online in at least 45 states during 2014 and 2015.

Anticipating the rapidly expanding use of online instruction, assessment, and learning tools, ACT fully supports the high-capacity broadband goals identified under President Obama's "ConnectED" initiative announced on June 6, 2013. ACT likewise urges the FCC to adopt the guidelines in the ConnectED initiative that would connect the schools and libraries serving 99 percent of our students to next-generation high-capacity broadband with speeds of no less than 100 Mbps and a target speed of 1 Gbps, and that would provide this high-capacity wireless connectivity within those schools and libraries within five years. These goals signal realistic targets in relation to actual needs in schools and libraries, and ACT therefore recommends that these goals form the parameters of broadband capacity in a modernized E-Rate program.

Accommodating Rapidly Expanding Online Instruction and Learning

New models of education are emerging, allowing learning to occur at any time and in any place. The generations now enrolled in the nation's schools expect teaching and learning to involve connected devices. The SEDTA report, referenced above, observes: "It is a simple fact that access to high-speed broadband is now as vital a component of K–12 school infrastructure as electricity, air conditioning, and heating." The FCC's own 2010 survey of E-Rate-funded schools found that nearly 80% of respondents characterized their broadband connections as inadequate to meet their current needs.

Today, every state allows some form of online education. New laws in many states are unbundling education by allowing students to take online courses from other schools, universities, or entities. Recently, Florida allowed students to use Massive Open Online Courses (MOOCs) to earn high school credit. The physical classroom model is also being reimagined through blended learning, which combines the best of face-to-face and online instruction. Sophisticated technology systems adapt lessons, videos of lectures, and resources to individual student needs, allowing teachers more one-on-one time with the students who need it most. Such tools for teaching and learning should be available to all students and this rulemaking presents an opportunity to ensure that the E-Rate continues to promote digital equity among the nation's schools, regardless of geography or economic circumstances.

The first generation of connectivity under the E-Rate program provided a foundation for incremental improvement in schools. Given the rapid changes in user expectations that have taken place in such a short period, it is more important than ever that the availability of broadband access to schools and libraries keeps up with the pace of technological change.

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ACT commends the FCC for taking on the modernization of the E-Rate program, and appreciates the opportunity to comment on the urgent need for greater broadband capacity. We strongly urge the FCC to treat the modernization of the E-Rate program as a high priority.

Sincerely,

A handwritten signature in blue ink, appearing to read "S. Montgomery", with a long horizontal flourish extending to the right.

Scott Montgomery
Vice President