What bandwidth do I need to support digital learning?

Students need sufficient bandwidth in order to take advantage of digital learning in the classroom. Today, "sufficient" means at least 100 kbps of bandwidth per student, but that number is growing quickly. The Federal Communications Commission suggests a 2018 connectivity target of 1 Mbps per student in order for schools to truly take advantage of technology’s ability to transform teaching and learning. Many schools desire this robust connectivity for their classrooms, but lack the funds necessary to obtain it.

What is E-rate?

The Schools and Libraries Program, also known as E-rate, is a federal program designed to help public schools and libraries afford telecommunication services. As of December 2014, **$3.9 BILLION** is available annually to help subsidize these costs. School districts can receive federal reimbursements for up to 90% of the cost of their connectivity services.

In order to receive federal reimbursement, districts must file two forms: the Form 470 and the Form 471. A district files a Form 470 to solicit bids for a specified list of products and services. After a competitive bidding process, the district will select a winning vendor and file a Form 471 to request reimbursement for these services. Services that are eligible for reimbursement fall into two groups, known in E-rate as Category 1 and Category 2.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>EXPLANATION</th>
<th>ELIGIBLE SERVICES</th>
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<tbody>
<tr>
<td>Category 1 (Internet Access &amp; Wide Area Network)</td>
<td>Connectivity between sites. C1 covers monthly service charges and non-recurring/construction costs for direct Internet Access and WAN connectivity between campuses, whether it is leased or owned.</td>
<td>Fiber (lit and dark) Wireless (e.g., microwave) Cable modem DSL Satellite service Broadband over power lines T-1, T-3 Dial-up Voice services</td>
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<tr>
<td>Category 2 (Internal Connections)</td>
<td>Connectivity within sites. C2 covers Wi-Fi products and services, usually with a non-recurring charge.</td>
<td>Access points Antennas and cabling Caching Network switches Firewall services and components Routers Racks UPS/battery back up Supporting software Managed services (e.g., Wi-Fi) Basic maintenance, repair, and installation</td>
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About the Nevada Connect Kids Initiative

The Nevada Connect Kids Initiative was created to increase broadband Internet access, adoption, and use across the state. As part of the Initiative, Governor Sandoval announced an investment of $2 million for a state matching fund to ensure schools have the infrastructure they need to access to high-speed broadband.

The Office of Science, Innovation and Technology will administer and manage the fund in order to draw down additional federal funding to assist school districts and libraries with their network upgrades. OSIT and EducationSuperHighway are also collaborating in order to support districts’ as they move through the planning and procurement process to connect every classroom in Nevada.

How does E-rate fit into the Initiative?

In order to meet the goals of the Initiative, the state of Nevada must increase the amount of E-rate funding for which we apply. OSIT plans to work with districts to:

- Increase the percentage of requests approved
- Expand access to broadband in rural corners of the state
- Ensure every Nevada student meets the 2014 FCC connectivity standard (100 kbps/student)