Rwanda is reporting major progress in expanding affordable, high-speed internet to its schools through the global Giga Initiative, a move officials say is strengthening digital learning across the country.

The country is using detailed school mapping, new connectivity standards and real-time monitoring tools such as Giga Meter to improve internet service. Officials say these tools are helping the country lower costs and build a reliable foundation for digital education.

The project began in 2019 through a partnership between the Ministry of ICT, the Rwanda Information Society Authority, UNICEF Rwanda and Giga, a joint program of UNICEF and the International Telecommunication Union. At first, the program connected 63 schools, including 13 that serve students from nearby refugee camps. Most relied on 3G or 4G mobile networks, which were slow and expensive, limiting digital learning.

To reduce costs and improve service, Giga grouped demand from schools in the Bugesera district. This allowed internet providers to invest in fixed wireless systems and, in some cases, fiber-optic networks. As a result, schools now receive at least 25 Mbps of bandwidth, with the option to increase speeds up to 100 Mbps. The government and development partners also provided devices to support classroom learning.

The improvements have been significant. Internet costs dropped by about 55 percent, from roughly $20 per Mbps to $9 per month. Connection speeds increased more than fourfold once fixed infrastructure was installed.

Denis Mupenzi from UNICEF Rwanda said the organization’s procurement strategy helped attract private companies and secure better pricing. Real-time monitoring tools also help identify slowdowns and ensure service providers meet their commitments.

The connectivity push is part of Rwanda’s broader digital strategy, which aims to boost economic growth and expand opportunities for young people. A partnership with Airtel has connected 20 youth centers and 281 schools, offering free access to online courses that help students develop digital skills. UNICEF has also worked with providers to whitelist educational websites so students can access learning materials inside and outside the classroom.

UNICEF notes that internet access alone is not enough. Lasting improvements require devices, quality content and teacher training. In one rural school, a teacher named Nshuti now uses online resources to explain the effects of extreme weather such as floods and landslides making lessons more engaging and relevant for students.

Rwanda’s progress shows how targeted investments, strong partnerships and real-time data can expand digital learning and create new opportunities for students across the country.