



## MSD Wayne Township: Fiber Optics Not Solution for High Mobility Families

MSD Wayne Township, an urban district in Indiana, has 16,500 students representing many socioeconomic levels with great diversity. Mobility by families within the district and surrounding districts were every day, so even before the pandemic of 2020, the district identified that 13 percent of the district's families struggled with connectivity at home. Pete Just, the Chief Technology Officer and Chief Operations Officer, and his team were responsible for supporting connectivity for teaching and learning. They had low-cost Internet programs in place, such as Comcast Internet Essentials. However, due to the frequent change of address, high mobility families struggled to qualify for the hardline connectivity solution. So Just and his team sought out the Sprint 1Million Project to help alleviate the connectivity problem. This project provided students who did not have reliable Internet access with mobile devices and free high-speed Internet access.

### **Need vs. Want**

However, everything changed in March 2020. The district clearly understood an increased need for family connectivity during the pandemic. So, Marion County school districts became part of the Indy Learning Fund initiative, a group of high-tech companies in Indianapolis that provided three and a half million dollars worth of funding for either Chromebook or mobile devices. As a result, the district procured 1900 hotspot devices for students in response to remote learning and the need for reliable high-speed Internet at home. Their initial distribution of the devices was by expressed need by a family. The district then refined the process by having the home-school liaisons seek out those who might not have come forward for hotspot devices. The district's homeschool liaisons are the ones that work directly with the families to determine their needs, and now one of the items in their arsenal of opportunities to equip those families is a mobile hotspot.

### **One Device Per Student**

While the distribution of hotspots was a valiant effort to connect all students, especially the mobile ones, to their learning, the CoSN Home Internet Connectivity Study identified that the distribution of hotspots by households was insufficient. Along with the study results, they heard from classroom teachers that students could not fully engage in an online lesson because their connectivity was unreliable. In addition, as identified in the CoSN Study, the mobile hotspots' bandwidth was insufficient when using video and when multiple students in a household were simultaneously connecting to the Internet. Using the recommendations from the CoSN study,

the district shifted its approach midstream of the pandemic to provide each student in the household with a mobile hotspot. They measured the sufficient bandwidth of each household's student's ability to connect to their learning by the feedback from principals and teachers. While it was their only metric, the CoSN Home Internet Connectivity Study results showed that if the teachers were doing an interactive assignment where the students were sharing their screens and streaming their video, this was not always adequate. Also, interestingly, Just and his team realized that although families might have one device per student, they were all hitting the same cell tower. So, even with unlimited data plans on the hotspots, the demand on that cell tower would sometimes throttle their access. The district worked with teachers and students to limit the time students had their videos turned on and encouraged them to use neutral backgrounds such as the ones available through Google Workspace.

### **Connectivity Still a Priority**

After the district got away from remote learning and students were back to in-person learning, there was a reduced need for home connectivity. However, home connectivity for students and families is still a priority for Just and his IT team. A significant positive aspect of the pandemic is it shifted people's thinking dramatically about student agency. Having no choice but to empower students with how they learn during the pandemic has ensured that home connectivity will continue to be an essential component of education. Just said, "One of the things that came out in terms of learning for us is there are various levels at which the Internet gets utilized to meet the learning objectives. If teaching continues to advance and evolve, you should see students interacting back and forth in groups and using video. So, to some degree, home connectivity relates to pedagogy. Home connectivity will need to improve if pedagogy evolves to include more interactions and content creation."