

## INTEROPERABILITY CASE STUDY

## Morgan County School District

Metro Status: rural Number of Schools: 4 Number of Students: 3,000 Device-to-Student Ratio: 2.5:1 IT FTEs: 2 Interoperability Level: 1 It was just days before Spring break, but Morgan County School District IT Director Terry Allen had a needle to find in his district's haystack.

Someone had plugged in a device that sent out a radio signal disrupting his high school's Wi-Fi system, and it had to be found, or there would be no break during the Spring break. The only option was to go classroom to classroom, seeking to find what was very likely an unintentional, offending device.

If there was a saving grace, it's that Morgan is a small district, with relatively small buildings. Allen and a few colleagues set out to do the dirty work.

That's life in a small, rural district, this one in a high valley in the Wasatch Range, east of bigger municipalities such as Ogden and Salt Lake City, where many of Morgan's residents go to work.

With four schools and a little more than 3,000 students, Morgan County is in one of Utah's more affluent counties, Allen said, but it's also one of its least-taxed counties. So dollars are tight, and that certainly is true for Morgan's IT team, which consists of Allen, a full-time network administrator and two part-time technicians.

Morgan County is a district where there was no Wi-Fi until six years ago, where devices get shared and the total budget for the IT department is largely devoured by salaries, benefits and renewing software licenses. "The interoperability model... helped me to realize I don't have to do this overnight. I can just take a step and do one thing at a time as we move down that road."

It's a place where Allen candidly says they're in an "emerging" status when it comes to interoperable systems seamlessly sharing data back and forth.

And yet Allen might be one of the future's best proponents, an IT director who sees how understanding the long-term process and prospects of interoperability hold out hope, even for relatively isolated districts like his.

By learning that the future of system-to-system communication can be mapped out in the Consortium for School Networking's Interoperability model, Allen can see the path for the district's journey -- and that it begins with the first step.

"The model makes it manageable for IT directors such as myself that are out in the rural area, where you don't have a lot of support, you don't feel so overwhelmed that you throw your hands up and say, 'What's the use? it's not going to work'," he said. "And that's the thing about the interoperability model is it helped me to realize I don't have to do this overnight. I can just take a step and do one thing at a time as we move down that road."

Morgan school district has a long road to move down.

It's a district that is a bedroom community for those larger towns, with agriculture and ranching the big parts of the economy. Morgan County's IT budget is lean -- \$230,000 in operating funds and \$91,000 in capital expenditures.

But the attitude toward IT has changed.

In the past, Allen said, the answer to every question touching the budget was, whatever costs the least. Now, he said, "We look for a permanent solution." "I understand the concept [of voluntary help], but when you're looking at data security and things like that, you can't just hand over passwords and accessibility to everybody."

Morgan County Superintendent Dr. Douglas Jacobs was a key player in getting the school board to hear the IT department and its needs, Allen said.

Gone, Allen said, were the days when the district sought community volunteers to help out with IT.

"I understand the concept [of voluntary help], but when you're looking at data security and things like that, you can't just hand over passwords and accessibility to everybody. So it's been a blessing that when we were able to ... identify and articulate the direction we wanted to go and what we thought we needed to do to get there. The school board was very supportive and our superintendent was really supportive."

Now, the district purchases equipment with the future in mind, not settling for what's most affordable, Allen said. Switches and other equipment have the district poised for growth – definitely a change from times past, he said.

The thinking, Allen said, was what do the students on the other side of the Wasatch have that Morgan County students do not?

"We can keep building buildings, but if we want students to have the same experience that they have as on the other side of the mountain, we got to put some money here," he said.

Also on the plus side, Jacobs got the IT team an extra \$50,000 a year, and that comes on top of some real funding from the state, Allen said. The district, which has a 1 Gb pipe coming into the district, is going to get a second Gb courtesy of the state and within two years, will go up to 10 Gb, Allen said. *"Sometimes we don't understand each other because we're talking a different vocabulary."* 

The district now can send and receive some reports for its student information system, such as new student data and information for its school lunch nutrition program, Allen said.

"Those things are going well," he said. "That's why I'm excited for what we have in the future."

It wasn't long ago that information from the SIS had to be reformatted into something the state could accept, and then saved on a flash drive or DVD so the state could read the data, he said.

On the other side are challenges implementing the technology in the classroom. New staffers, fresh out of school, can feel slowed down by the district's existing technology, while experienced teachers can get frustrated having to train on yet another new device or program.

"We look for things that don't have a huge learning curve on them," Allen said.

As for the teachers new to the district, Allen says it's a "give-and-take" to help them understand that Morgan County cannot keep up with the technological spending of universities.

Then there's the more basic issue of access. Parts of Morgan County do not have internet access, he said, so the district is pondering ways to get families in remote areas on equal footing with the rest of the district.

It's an issue that the district will be working at along with the simple availability of devices. Right now, Morgan County has about 2.5 students per device. Devices are shared and rotated through classrooms, Allen said.

Another issue is demand. People are moving into the area faster than technology can keep up, he said, so there's always a strain on resources that as yet are not interoperable. Learn where your district sits on CoSN's Interoperability Maturity Model and access interoperability resources at cosn.org/interoperability

There also is the perennial problem of vendors who want to sell only their products that speak only one language, he said.

For a county of around 11,000 people, it might sound like a small matter to some districts. But to Allen, it's a big deal and something he was grateful to be able to share at CoSN meetings, where big and small districts were equal.

"I just really enjoyed having that opportunity ... to represent Utah and any small school district out there," Allen said. "You got to understand, [a big IT budget], that's not what our life is. Sometimes we don't understand each other because we're talking a different vocabulary."

"And so to me, this is like wow, there's somebody who cares about the entire system from the top to the bottom and it's not just the affluent that are calling the shots and making the decisions," Allen said.

Allen said he's determined to move Morgan County up through the CoSN maturity model.

"I'm hoping that as we move through the steps we continue to see the value in it so we can continue to pursue it aggressively each year and try to accomplish" the district's goals, he said.