

CASE IN POINT: HOW MISSISSIPPI BUILT SUCCESS AND STABILITY



James Mason
Director of Student Assessment,
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The state of Mississippi has been using online testing to re-test high school students for their four graduation exams in Algebra I, English II, Biology I, and US History since 2003. Mississippi's online testing program began in 2001 with pilot testing, and has since grown to deliver an average of 10,000 to 20,000 tests each year across all 152 school districts in the state.

Here, James Mason, Director of Student Assessment, MDE, and Jan Kirkland Hogue, Contract and Assessment Analyst, MDE, discuss (via an interview) the challenges and successes of their state's transition to online testing and what they anticipate to be the future of online testing in Mississippi.

James Mason: I think it is important to point out that we've been through two phases. We had one or two early—I would use the word “catastrophic”—failures from the district perspective. *[Laughs]* But it was just a shared misery until we got to the current platform that we're now using, which has been much more stable, much more robust, and a much better experience.

We've gotten to the point now where online testing is as it should be, and where the technology doesn't get in the way. It has been very stable now for the past three or four years.

Stakeholder reactions

Jan Kirkland Hogue: A lot can be said about this. Students are very engaged in online testing, for the most part. They like it. The district test coordinators love it. It's less paperwork. They don't have to worry about inventorying the test materials or losing things, so they like it. They love getting the test scores back sooner.

We have had parents say students do better on a paper and pencil test. We have had parents say they do better on the computer. There are mixed reactions. But of course all parents like to get the scores back sooner. So you've got some positives, you've got some negatives. But overall when the technology works, it's a dream. When something goes bad, it's like what James said: it's a catastrophic nightmare. We have had flawless administrations for the past several years. It's either great, or it's horrible.

James Mason: The accommodation piece is the biggest thing that we have never fully exploited or gotten our hands around in online testing. That is another little logistical piece. Because right now when you do read-aloud testing, in some cases they have books, but in some cases the test administrator has to read over the shoulder of a child, which is not a very conducive test environment. So [how to address] students with special needs is a big concern.



Jan Kirkland Hogue
Contract and Assessment Analyst,
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Lessons learned

Jan Kirkland Hogue: I have a list of them:

- Testing the system before the actual test is absolutely a must.
- Training for all new users, or users who have a little experience but are still kind of rusty—that is key.
- Always have an emergency plan. The testing office in charge of this should have an emergency protocol with the testing vendor, or the sub-contractor for the online testing. If anything goes wrong that needs to be handled, you have a plan, a call-in number that you can immediately talk to the people who know what's going on, so you can formulate your specific emergency plans and communicate to your state's districts as soon as possible.
- I would say the biggest thing, each day of the test (early before it starts) is to make sure that the people in charge of the bandwidth check it, and ensure it is exactly right. So I would be very careful that all morning checks are done and rechecked. That was huge.

James Mason: A lot of lessons learned related to IT: You must think about your lowest common denominator. Right now we have some school districts with a 100-megabit pipe that is absolutely clogged, and then we have some districts with a three megabit connection that's not fully utilized. So it's not just what do you have access to, but rather the appropriate question is what are your requirements? From the company perspective, it's inexcusable in today's environment for vendors to roll out platforms on which they can't support certain capacities, or that have not been through rigorous load capacity testing. So I think the tolerance level for vendors is going to be very, very small from the state perspective.

For a paper test administration, we had always put two people in a room to administer a test—a test administrator and a test proctor. But what we found is that when you're doing online testing, you need three! Because you had to have a couple of people walking around helping and interacting and observing, but then you had to have somebody watching the computer monitor to make sure that the kids were on task, and they were working at the right place.

The greatest challenge

James Mason: I don't think the human part is as problematic now as it was. And every year that goes by, that gets easier and easier. I think it's a budgetary thing just in having the equipment or the devices to move towards more online testing. But more so than that, I think also related to budget is infrastructure.

I think it's going to be fascinating to see how vendors respond to these RFPs with the different consortiums, because I'm not convinced that the device with which you're going to be able to test 31 million children is on the street today. I don't know if it's going to be some type of tablet device ... it could be a variety of things. For instance: we could have a tablet that would come to you preloaded with the assessments and all supporting files, and then the students can take the test on this tablet/device, and when finished, you just upload the student's responses.

That type scenario takes dramatically less infrastructure and bandwidth, but it's a model we have not yet fully developed or tested. You're never going to be able to test that many children on anything just online very well, using existing technology given the applications and hardware that I have seen and used over the years.

Anticipating change

James Mason: It's going to be different... I don't think we're using technology as fully as we can. One of the areas that I would be really interested in exploring is how can we leverage technology with read-aloud accommodations. Providing accommodations in testing today is very, very labor intensive, but it would not be so labor intensive in the technology-assisted environment. You could put ten different students with ten different tests in one computer lab or classroom, and just have a couple of people supervising them, whereas before it would take me 20 people to do the same thing.

My hesitancy now is on capacity. Now that our curriculum is much more rigorous with standards that are more in line with national assessments like NAEP, the failure rates have gone up significantly and dramatically—to the point that we wouldn't have the technology base in all of our schools to support a re-test with our new curriculum framework.

The n-count for the online tests under the old curriculum is now very low as students are graduating or just moving on. My main concern is having the capacity to test the large number of students who do not pass the more rigorous tests. If you really have a rigorous assessment system, are you going to have the capacity in place to deal with it in an ongoing basis?

Moving forward

James Mason: I think people need to be very deliberate both at the user end, and at the vendor level, in pushing change too quickly. Again, what you've got now might be great, but the fatigue factor with change can take an incredible toll, even when the change is for the better.

I also think it is important that we make distinctions between instructional technology and assessment technology. Someone recently pointed out this distinction at an EIMAC meeting and I think it is a critical discussion that needs to take place. With the proliferation of tablets, smart phones and other devices, our constituencies will likely not understand why we are not able to change more quickly in the area of large scale assessments.

Jan Kirkland Hogue: I would recommend doing a small pilot in any state who is transitioning to an online system or even a new online system to work out the kinks. You need to expect the unexpected. You cannot imagine the different things that can come up with online testing. For instance, the very first time that we used it, we had a meteorite storm that completely shut down the whole system. Now, who would have ever thought that would have happened. Such a storm hadn't happened in 400 years, and on the very first day of testing, that's what happened and we couldn't finish testing that day. So I would say expect the unexpected.