Mark has just received the grade on his most recent Spanish assessment, and the news isn’t good. As school leaders, we collect copious amounts of student data, yet it doesn’t allow us to identify students like Mark until after they fail.

At Minnetonka High School (MHS), we have implemented a proactive, schoolwide approach to changing the trajectory of struggling students before they fail and redirecting them toward academic success. Every Wednesday, an average of 600 students are invited to individualized sessions to address learning gaps. This intentional and just-in-time intervention approach has reduced failing grades by 33 percent.
How the Journey Began

In 2014, our school set out on a journey to maximize student learning with a program that would increase support for all students in academic distress. Based on previously implemented intervention models, we knew the following elements were essential for our system to fulfill its purpose:

- All barriers to students receiving academic support needed to be removed.
- The academic support interventions needed to be based on the most recent assessment evidence.
- The process of assigning students, tracking attendance, and communicating expectations needed to be as automated as possible.
- The support system for student success was not to be left to just the teacher, but was to include counselors, the hall paraprofessionals, and principals.

Once the criteria for success were established, a small group of teachers and principals created a system to fulfill them that’s now known as MAST—Minnetonka Academic Success Time.

Removing Time Barriers

For years, MHS teachers have been available to assist students before school. Unfortunately, buses do not arrive until minutes before first period classes begin. To enable all students to receive assistance outside of a scheduled class, we needed to insert instructional time into the core school schedule. Working with faculty, we were able to insert an extra period on Wednesday of each week by shaving six minutes from each 56-minute period that day. The MAST program takes place from 8:00 to 8:40 a.m. each Wednesday.

A common question we field is, what do the other 2,700 students do during this time? With buses arriving at their usual times, many more students than those assigned for MAST are in the building. The key consistent expectation is that this is academic time for all. Students not assigned to a session can access many other support programs, including visits to writing coaches, math coaches, peer tutors, and the testing center. Many students find this time ideal for collaborative work. MAST, along with the increasingly collaborative nature of student learning, has forced us to reconsider our use of physical space, too. For example, over the past three years we have removed 800 lockers and replaced them with student work environments, and we have entirely redesigned our media center.

MAST serves as an important midweek pause for students to receive targeted support, utilize other resources or spaces, or in many cases (particularly for upperclassmen), get a few extra minutes of rest.

As in many schools, our students are extremely involved and, at times, struggle to harmonize their different commitments. To that end, MAST serves as an important midweek pause for students to receive targeted support, utilize other resources or spaces, or in many cases (particularly for upperclassmen), get a few extra minutes of rest. The incentive of “time” is compelling to our students.

Initiating Just-in-Time, Intentional Intervention

Unlike teachers’ open office hours (during which interactions are initiated by the student), with the MAST program teachers identify challenging topics and intentionally invite students for an individual or small-group MAST session.

Students are assigned using a web-based scheduler and via in-person invitations. Though our scheduling application has pushed our program forward in multiple game-changing ways (MAST ran on in-person and open-access technology for the first year and a half), students relay that the in-person teacher-student communication is still most impactful, particularly when the conversation includes “the why” (e.g., “I would like to see you Wednesday for MAST to work on your Civil War document-based question. I have a couple of suggestions, and with some focused time, I think your essay could really improve.”). There is no hard-and-fast number of students for teachers to assign; we give the general guideline of up to seven students. This allows teachers to be precise in their approach, as some weeks they may have a
student who needs direct support for the full period, and in other weeks they may want to offer more general preparation for a forthcoming assessment.

The impact of this just-in-time and intentional teacher action is personal. For instance, one of our students, Ashley, noted that her invitation to MAST from her English teacher signaled to her that the teacher noticed she was struggling, cared about her, wanted to help, and believed that she could be successful.

**Systematic Administration Informed by Data Analytics**

A systematic weekly approach for identifying and inviting students for MAST sessions is a key component to program success. Here’s how the program works:

**Monday:** Teachers invite students.

**Tuesday:** Counselors and case managers review assignments, with special attention paid to students assigned to multiple classes. They then select the one session each student should attend. Teachers receive notification when a student they have assigned is removed from their session.

Teachers also know when they are assigning a student who has already been assigned elsewhere—yet they still might move ahead with the assignment if they are noticing signs of significant need. In these cases, teachers should send a comment to counselors and case managers outlining their reasons to work with the student. To ensure that students are still in our Wi-Fi environment, notifications are sent prior to the end of the school day via 1) student email, 2) parent email, and 3) a push notification to their school-issued iPad.

The ability to view and resolve multiple bookings has enhanced the MAST program in two key areas. First, it provides clarity on where students should be.
When students are invited in person by multiple teachers, it can be hard for them to know how to a) prioritize their time, and b) navigate communication with teachers on why they were not in their session. It also removes the opportunity for students to miss all sessions because of confusion around which one to be in.

Secondly, it allows faculty and staff to prioritize their time leading up to and during MAST. Counselors meet with the roughly 10–15 students on their caseload who are multibooked to identify which session they should attend and create a broader plan for success in all courses. Then, during MAST, counselors, administrators, and support staff float around the building seeing to it that these students make it to their sessions.

**Wednesday:** Buses arrive on time, and we are ready to help the 120 or so students who were multibooked to their assigned location. We also watch for the 400 or so students who were single-booked. The goal of the entire system is to get students in highest need of support in front of the teachers who can best help them. MAST also presents an authentic opportunity for us as principals to show students that their success is important to us. We commonly show up to sessions with students who were recently involved in less-pleasant interactions; this strategy helps us to acknowledge them for coming in and to offer our continued, positive support.

**Thursday:** The same attendance expectations and routines are followed for MAST as regularly scheduled courses. Parents receive an email notification when their teen did not attend. Counselors receive a digest email for their caseload of students who were absent, including a running tally of MAST absences. They use this data for ongoing planning for student success, not to issue consequences.

**New Actionable Insights**

MAST data is a central component to our overarching, ongoing system of progress monitoring for all students. Included in this monitoring from MAST are 1) the number of weeks students are multibooked, and 2) the running total number of sessions to which students are assigned. These data are considered alongside current grades, external assessment scores, past grades, and attendance patterns. As we try to identify struggling students in time to provide support, we find that MAST assignments provide the most actionable insights of any of these sources.

**Results**

With the specific focus of MAST on student intervention, we look at course failures to start to understand the impact of the program. In comparison to the semester preceding the full implementation of MAST, we have experienced a 45 percent drop in total failing grades earned, a 33 percent drop in the number of students earning a failing grade, and a 25 percent drop in students with multiple failing grades. Students recognize the value of MAST, with 95 percent of those surveyed rating MAST as helpful. With failing grades substantially reduced, we are now able to address grades such as Ds and other indicators of underperformance.

We are pleased with the success of MAST because it’s available to all students within the core school schedule, and because it provides constant analysis of data to identify and provide support for students with the greatest needs. It requires involvement and ownership from all—from the paraprofessional to the principal.

Now that Mark’s Spanish teacher has the system and tools to support him, his iPad is lighting up with his invitation. He knows that his teacher believes he can do it, and he will get some help before it is too late.

Robb Virgin is assistant principal and Jeffrey Erickson is principal at Minnetonka High School in Minnesota.