DOINGWHATWORKS

MacArthur Ninth Grade School

12111 Gloger Road
Houston, Texas 77039
Principal: Craig Mullenix

- High (9)
- 83% Hispanic
- 12% Black
- 4% White
- 79% Free or Reduced-Price Lunch

As part of MacArthur Ninth Grade School's well-established vision of data-driven instructional and programmatic decision making, the principal works closely with the administrative team, support personnel, testing coordinator, and teachers to plan each school year and develop curriculum that is tailored to the needs of students. Before each school year, teachers begin to examine incoming students' data from the Texas Assessment of Knowledge and Skills (TAKS). These data help to determine the master schedule and place students in appropriate classes. Students identified as lacking essential English skills are placed in a "grad prep" reading class to receive extra support. Students identified as lacking skills with math concepts that are essential for success in Algebra I are also placed in a "grad prep" math class. The school's math skills specialist works with department teachers daily—supporting data analysis and planning, observing lessons, providing constructive criticism, modeling questioning strategies, and writing curriculum for and teaching a session of the "grad prep" math class.

Using Data for Curriculum Development

Each summer, the principal sets aside funds to design curriculum. During this time, teachers work together to finalize all aspects of the curriculum for each core subject area, such as determining skill objectives; warm-up activities; lessons, activities, and readings; and strategies for teachers. According to the principal, the curriculum design focuses on "specific objectives . . . [that are] much narrower and more specific than the district objectives." The principal adds that this process results in "a rich curriculum that starts broad and ends with the specific—with objectives and activities planned." Teachers may use assessments and data analysis to further refine the curriculum during the school year. For example, the assistant principal for curriculum noted that students were struggling with literary elements. To identify strategies to address the issue, teachers observed, discussed, and implemented key aspects of successful lessons from other teachers.

Analyzing Data

Subject area teachers use daily common planning time to create assessments, analyze and reflect on data, and refine lesson plans. If data indicate that students are having difficulties mastering the objectives outlined by the Texas Education Agency, then teachers change instruction and focus on different instructional strategies. During the 2008–09 school year, the chairperson of the science department noted that teachers delivered content primarily through lectures and PowerPoint presentations, and the data revealed that students did not master the objectives. Based on this analysis, teachers began to provide students with printouts of the PowerPoint presentations and designed new cooperative classroom activities. For example, one biology teacher had students use chalk to draw diagrams and charts directly on the black lab tables.

All subject areas follow three-week and six-week assessment cycles. For the three-week assessments, teachers develop a test that typically includes 12–15 multiple-choice questions based on district benchmark assessments. The results help teachers plan instruction and provide interim feedback to students. For science, the three-week assessment is usually product-based (e.g., the Evolution Cube Project).

The six-week assessments are the districtwide benchmark tests that contain 15 questions. Teachers typically add additional items to ensure a minimum of four questions about each objective. After assessments are scanned and scored, teachers return the results to the students. The students count their errors per objective, determine and record their percentages, and set personal goals for the next assessments.

To analyze these results, teachers enter them in a spreadsheet that was created by the testing coordinator. To determine whether the results of an individual teacher align with the average in the department, teachers meet by department and compare the passing percent of each class with the average in the department. Then teachers reflect on the results to determine (a) areas of instruction that need to be strengthened and (b) specific objectives that should be retaught for a whole class period or revisited through daily warm-up activities.

The district has established a 70% mastery goal for the six-week benchmark assessments. Students who do not meet this goal participate in after-school tutorial sessions. Each core subject has one day after school set aside for these sessions. Through a written letter from the school, students and parents are notified in advance when tutoring is required. At final bell, teachers conduct an "after-school roundup" of students required to attend tutoring. Once those students report to the cafeteria, all other students are dismissed. Students receiving this additional support are retested until they achieve the benchmark goal.

Setting Clear Expectations and Grading Criteria

Teachers in all core subject areas use product guides and rubrics. Product guides outline expectations for each activity-based assignment. For example, English teachers require that students who study *Romeo & Juliet* create a Renaissance newspaper. The product guide explains the requirements—a review of the play, obituaries for characters that die, a sports page about games played during the Renaissance, etc. Rubrics are aligned to the product guides and explain the grading criteria. For the Renaissance newspaper, the rubric is a four-point scale for each aspect of the assignment (e.g., documenting appropriate sources in the designated citation).

Product guides and rubrics are tailored for each core subject area. In English and reading classes, product guides and rubrics are typically combined into one document. In science, the product guides are separate from and tend to be more specific than rubrics. The product guide for DNA lists the project components that students need to create to earn points. Students' activity-based assignments are displayed throughout the school, accompanied by the product guides and rubrics. Teachers commented that the product guides and rubrics provide students with the opportunity to "take ownership over their own learning."

All aspects of teaching and learning at MacArthur Ninth Grade School are connected to using data in instructional decision making. The testing coordinator noted that administrators and teachers do not make "drastic changes as soon as the data come out." Instead, they use a problem-solving approach to fuel discussion of paths and trends. The administrators help teachers grow in their use of data and instructional strategies and work with them to "judge what they think is good for their students." In this way, teachers feel empowered to make thoughtful decisions based on data.

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