

Dean Middle School opened its doors to students in 1955 and is currently the home of 1621 students in 6th, 7th, and 8th grades. In Cypress-Fairbanks ISD, advance planning to support the needs of tomorrow's learners is a priority and the activities taking place inside Dean classrooms today are probably something former CFISD teacher and school namesake Berta Dean never envisioned when she retired in 1957. As part of a 2014 bond program, the technology infrastructure across the district was updated to support the increase of technology integration in classrooms. Beginning in 2016, Dean Middle School classrooms were equipped with interactive Promethean panels, Hovercams, Lightspeed communication systems, 8 Chromebooks in each reading/language arts, science, and math classroom. Teachers can reserve additional Chromebook carts through the library and students have access to 40 Chromebooks and wireless hotspots for home use overnight or over a weekend. After a recent renovation, wireless access was increased at Dean, providing internet access to students who bring their own technology (BYOT) to school.

The increase in infrastructure and devices poised the staff and students at Dean Middle School to fully embrace a new digital learning environment. The BYOT access and home check out of Chromebooks and hotspots supports student learning both in and outside the school, but the true impact came through the transformation of the learning environment. Through professional development, on-going instructional coaching, and teacher collaboration, the staff at Dean Middle School are changing the way instruction is being delivered and students are learning.

Starting with the master schedule, teacher collaboration and professional development are prioritized at DMS. In August 2018, Eric Scheninger worked with the Dean staff to explore the impact technology tools can have on personalizing student learning. Knowing that purposeful technology integration is the key to increasing the rigor and relevance of student learning, teachers began approaching their planning in different ways. Content teams enjoy a common planning period each day and Small Learning Community teams in grades 6 and 7 are also provided a second common planning period. During this time teams move beyond the discussion of the "what" of their content and focus their conversation on the "how" of student learning. The integration of technology in the "how" is routine given the daily access to technology in the classroom. During the common team planning and after school, district technology coaches and campus instructional coaches meet with teams and provide on-going professional development and implementation support for technology tools such as Google Classroom, Padlet, Seesaw, Flipgrid, Classflow, G Suite, coding on TI-85 calculators, Desmos, Geometer's Sketchpad, Gizmos, Ozo Coding Bots, Motion Probes, Common Lit, Quill, Learning Farm, and Think Link.

Recognizing students have the potential to learn anywhere, anytime, and at any pace, teachers at Dean are moving beyond the traditional model of the teacher as an "expert" who must provide knowledge to students. Through small group instruction, project-based learning and a blended learning model, students are challenged to seek information themselves using technology and collaborating with peers. Teachers become true facilitators of instruction, having invested significant amounts of time

designing engaging experiences for students. Working with consultant Marcia Kish, teachers implementing blended learning have learned how to raise student accountability for their own learning with task checklists and personal data conversations. In the blended learning model teachers move through a three phase system that allows students the opportunity to gradually learn how to take control of their learning by choosing their place, pace and path. In each phase of the model there are four types of activities including a mini lesson based on student readiness, independent practice where students can productively struggle with content in peer discussions, digital content that allows students to engage with content in a platform that students today respond to, and future ready challenge that encourages students to creatively problem solve and collaborate with peers. In phase one, teachers determine the task each group is working on and set a timer for rotating to the next task. In phase two, students are given a checklist with a completion deadline. Phase two checklists contain mandatory tasks based on student data and content needs along with a variety of activities for students to choose from. In phase three, students move to a project-based focus where they apply what they are learning to solve real world problems. In classrooms that are implementing blended learning, flexible seating provides options for students to learn in the physical space most conducive to keeping them focused and engaged.

The transformation of classroom learning began during the 2017-2018 school year but has exploded during the current school year. We have already seen significant student growth in several areas. In 7th grade math classrooms where blended learning and student ownership of learning have been present since the start of the school year, on-level students are outperforming the 2018 STAAR All Student “at grade level” performance on comprehensive district assessments. We recognize that students choose where to give their attention and how much effort they will give to a task. The student ownership and choice in blended learning is resulting in students who are arriving to class before the tardy bell rings and immediately start working. These classes experience reduced tardies and little to no discipline problems.

We know that organizational transformation is an on-going process and we are looking forward to even greater levels of student autonomy and choice in their learning as all of our classrooms implement authentic tasks and select assignments that are designed to increase student engagement. For the Dean Mustangs, improved test scores are only one measure of the true success of small group instruction, project-based learning, and blended learning. In addition, we are experiencing an increase in positive student-staff interactions. Students want to be in class and they are motivated by knowing that their teacher has selected customized activities to meet their individual academic needs. We are proud to be personalizing student learning at Dean Middle School.

Campus Video: <https://youtu.be/Z2dUypQep8M>