

September 20, 2018



Dear Parents,

I would like to make you aware of an exciting development for this term's science instruction. We will be teaching units from a newly developed curriculum entitled Michigan Science Teaching and Assessment Reform, better known as **Mi-STAR** (<http://www.mi-star.mtu.edu>). This curriculum has been developed through a grant from the Herbert H. and Grace A. Dow Foundation to Michigan Technological University, in partnership with numerous other universities and educational institutions.

Mi-STAR is built upon the Next Generation Science Standards (NGSS). The NGSS is a nationwide effort to create educational standards that are "rich in content and practice...arranged in a coherent manner across disciplines and grades to provide all students an internationally benchmarked science education." Michigan adopted the NGSS in 2016 (see <http://www.nextgenscience.org/michigan>), and Mi-STAR is committed to delivering a curriculum to address these standards.

Mi-STAR significantly differs from other science curricula in numerous ways:

- The curriculum addresses all 59 of the grade 6-8 NGSS science and engineering performance expectations within the NGSS.
- It engages students in problem solving using science and engineering practices to address real world issues based on 21st century challenges.
- It involves student led investigations (with the teacher as facilitator) where the students are engaged in thinking like professional scientists and engineers in a guided, supportive environment.
- In many cases scenarios are provided to focus the student investigations on issues that can be evaluated in a community and/or Michigan context.
- Lessons are designed to provide hands-on, thought-provoking opportunities for students to test and continually reevaluate their own learnings.
- The curriculum includes assessment tools with standards-based grading rubrics that allow teachers and administrators to assess student learning.

Your sons and daughters may consult you on the real world implications of their investigations, for example: How much electricity do we use? Why is there flooding in our community? What are invasive species? Are we at risk from natural hazards? What natural resources do we use? This is a great opportunity to push science and engineering investigations and learnings outside of the classroom walls. We are excited to implement this curriculum, and we welcome your perspectives on what the students are experiencing.

Sincerely,
Mrs. Pierzecki