The Butcher School Site Habitat Development project is an interdisciplinary project which the 7th grade class will undertake during the 2019 - 2020 school year.

During Semester 1, students will be learning scientific, analytical, organizational, and communication concepts and skills in their Science, ELA, and Math classes that will enable them to develop and implement an action plan to improve the grounds surrounding our school in some way, perhaps to increase the biodiversity in the field habitat in the back of the school, or make use of storm water run-off to limit localized flooding, and/or to alleviate watershed pollution from runoff. The primary objective is for students to apply what they have learned in the three core classes to a real-world project.

Concepts and skills which students learn that will inform their projects and which they will need to incorporate and use within their action plans include:

- Make close observations of the natural world surrounding the school site
- Learn about the different parts of an environment and the essential things necessary for life; learn about the delicate balance of food webs within an ecosystem
- What is biodiversity? Learn about the impacts on biodiversity and think about how to increase the biodiversity at the school site
- Learn about native and non-native plant and animal species and contrast these with invasive species. Study the impact of aquatic and land invasive species on the ecosystems of Michigan and the Great Lakes. Investigate the effects of invasive species on the biodiversity of an area
- Conduct a study of the soil found in the surrounding areas of the school site. Use the data gathered from the soil study to inform action plan decisions such as the species of plant that will thrive in the school soil
- Assess the percentage of pervious and impervious areas on the school site. Learn about storm water run-off and its effects. Learn about ways to control storm water run-off to minimize its ecological effects such as pollution to the local watershed and the Great Lakes Basin
- What is sustainability? How can we design or produce to ensure sustainable environments?
- Consider the stakeholders for whom any changes to the school site must be approved or agreed to. Learn how to communicate action plans effectively and persuasively to garner support from stakeholders
- Determine whether changes to the school site would encourage the use of outdoor spaces for classes, lunch time, studying, and physical activity as well as consider the needs of the school community and the surrounding area

By Quarter 3, students will begin to work in groups of three or four (of their choice) to create a plan for the project. Students will need to use their learning from their Science, Math, and ELA classes to inform their action plan. Student projects will be graded on how well and how thoroughly they have incorporated what they have learned in to their projects. Instructions, guidance, rubrics, and time will all be provided by the 7th grade team of teachers when and as needed. Additionally, through the Eco-
Green program (a STEM education partnership between General Motors and the National Wildlife Federation), student groups will have several opportunities to work with mentors from GM and the NWF.

The School Site project is designed to be student-driven and to promote independent student thinking, practical application of concepts learned, design, effort, and collaboration. Therefore, the majority of the work and responsibilities rest with students and their groups.

Suggestions on how parents can assist their student

Logistics support - provide transportation for getting to & from student group meetings/work sessions, or going to the store to buy materials, help your student to procure materials and/or tools, help your student to get materials to school, help your student to be organized and on task, etc.

Financial support - help students to fundraise to cover the cost of their projects, make donations to their projects, suggest fundraising ideas, provide a means to procure materials online, etc.

Emotional support - monitor and encourage your student to manage their time effectively and to give their best effort to the endeavor, help your student to navigate the social nuances of group work and collaboration, encourage your student to communicate effectively to advocate for themselves and their project, be an exemplar of teamwork, cooperation, collaboration, and communication to your student, etc.

Project Timeline (projected)

Semester 1
Q1 & Q2 - Complete all work and activities in Science, Math, and ELA classes to learn concepts that students will need to inform and to incorporate into their school site project

Semester 2
Beginning of Q3 - Form student groups (3 - 4 students per group) & start planning for School Site Project Action Plan

Q3 - Develop action plan, research materials and estimate cost of project, present preliminary action plan to class, fundraise to cover cost of project, purchase materials for project

Q4 - Finalize project action plan, start build of large scale project structures (if any), plan workdays offsite, be ready with materials to work on designated workdays at school, create presentation and related presentation materials, rehearse presentation, give group presentation on Final Project Presentation Day week of May 25, 2020.

We look forward to seeing your student's work on this project. Thank you.

- (MS)^2 TC 7th Grade Team

Please sign and return the following Parent Acknowledgement to Mrs. Duddles by Tuesday, February 04, 2020.
PARENT ACKNOWLEDGEMENT

I have read the notice regarding the 7th Grade School Site Habitat Development Project and will assist my child in meeting the requirements for the project.

My Child,

________________________________________________________________________________________________________________________________________________________

Parent Name (print)____________________________________________________________________ Initial________________

Student Name (print)____________________________________________________________________ Initial________________

Contact Number_____________________________ Contact E-mail________________________________________