Orchard Ridge Elementary Outdoor Classroom

WE LOVE that our outdoor classroom …
• is community-designed and collaboratively-built with every student 4K-5th grade involved
• is truly a space of integrated learning
• helps our students develop a stronger and healthier relationship with food

Introduction

Orchard Ridge Elementary is located at 5602 Russett Rd. Madison, WI 53711. There are 377 enrolled students, 30 teachers for grades 4K – 5, and 6 other staff members including Principal Becky Kundert. ORE participates in Title 1, SAGE, and has a 4K program that indirectly participates in activities funded by the GROW initiative. The student population at Orchard Ridge is 83.2% White, Black, or Hispanic (35% White, 30.2% Black or African American, 18% Hispanic/Latino) with the rest of the students of multiracial, Asian, or American Indian/Alaskan Native decent (11.4% Multiracial, 4.5% Asian, and 0.8% American Indian/Alaska Native). Among the student population 61.2% are low-income students, 20.4% are English language learners, and 13.8% are special education students.

Garden Based Outdoor Education (GBOE) at Orchard Ridge Elementary began during the 2013-2014 school year. Parent and community volunteers helped teachers and students build planter boxes, one box for each grade K-5 located on Gilbert Road, and a planter box for K4 on the Russett Road side of the building. There are also some fruit trees (which will produce fruit in a few years) and berry bushes planted by the K-5 garden beds in addition to a water spigot and shed to hold tools and other gardening necessities. Last fall teachers and students added to that area of the outdoor classroom by planting bulb flowers. ORE has a forest that is shared with the Toki Middle School students who also share the school building. Some teachers at Orchard
Ridge have begun to bring their students outdoors for a different learning experience and are continuing to make improvements and additions to their outdoor classroom.

**Garden Development**

There are vast amounts of space ready to be used as part of a GBOE curriculum at Orchard Ridge, but the development of the outdoor classroom began with the forest located on the school campus. In the forest students and community members have built teepees from fallen branches and brush in which they can play and learn. New mulch was laid on the trails throughout the forest last year and there is a seating area made up of six log benches placed in a circle surrounding a small fake fire pit.

During the first year of the program teachers started introducing students to the concept of GBOE by incorporating dirt into their lessons. They composted, tasted different vegetables, decided what to plant in the planter boxes, and even planted some seedlings in pots in the classroom. This small but important introduction created excitement about the construction of the planter boxes and encouraged parents and community members to get involved.

The planter boxes, located along a high foot traffic road so that the whole community can enjoy them, are each assigned to a specific grade whose students decide what to plant in the box each year. Every student is involved in the planting process each season through the use of “square-foot gardening.” Each square-foot of the garden is planned out by the students and when the growing season is finished the students evaluate whether what they chose to plant was successful and if it wasn’t, why that was the case. Last year some students planted corn and learned that corn does not do well in small planter boxes. In addition to planting in the boxes last spring, last fall the students planted approximately 300 bulb plants (crocuses, tulips, daffodils,
etc.) along the fence next to the boxes. There is also a small shed and a water spigot located next to the planter boxes to make sure tools and water are close by for planting and plant care.

Prior to and during the implementation of the GROW grant, Orchard Ridge has received and continues to receive donations and help from volunteers throughout the community. Parents, teachers, neighbors of the school, members of the Good Sheppard Church, and many others have contributed time and supplies to the GBOE efforts of Orchard Ridge. In addition to the funds provided by the Madison Community Foundation (MCF) through the GROW Coalition that were used for purchasing materials for the planter boxes and funding ORE’s adoption of the People.Power.Planet program that helped students learn about sustainability, conservation, and reduced consumption, Orchard Ridge has also received a few other grants and donations. Those awards are:

- The Climate Showcase Communities grant from the EPA
- The Art in the Garden grant from Community GroundWorks
- A donation from Wind River Financial to fund a water source for the planters boxes and bulbs
- A donation from the McKay Nursery Company of 10 fruit trees (apples, pears, cherries, plums, and peaches)
- Benefits from the School Forest Education Plan grant awarded to Toki Middle School by the Wisconsin Forest Education Foundation (WEEF)
- Participation in the USDA Fresh Fruit and Vegetable Program

Staff Development

The Orchard Ridge Green Team was originally made up of two parents, Cynthia Moore and Chris Watermolen, and four staff members, former principal Barb Dorn, Melissa Langer (Reading Interventionist), Emily Feistel (Kindergarten), and Joshua Ludke (Art). At the urging of one of the parents, the group formed and submitted their request to be a part of the GROW program. Since the program began current principal Rebecca Kundert, Elizabeth Braun (Bilingual Resource Teacher), and Jessica Schmitt (First Grade) have joined the team. The team
meets once a month during the Fall and Spring and maintains correspondence during the winter months via email.

The creation of a more developed GBOE program at Orchard Ridge will lead to more teachers feeling comfortable bringing their on a regular basis. At this point in time, most of the teachers feel too intimidated to bring their classes outside. Outdoor education should include “hands on activities that related to classroom learning” and should “put students learning into practical function” (J. Ludke, March 20, 2015). The outdoor classroom, when utilized properly, should fit seamlessly into the predetermined curriculum that teachers have already spent time creating.

Joshua Ludke and one of the parents from the Orchard Ridge Green Team attended the Growing Minds: Garden-Based Learning from the Ground Up workshop at Troy Gardens. The workshop was a “…5-day, 20-hour course… designed for K-12 teachers and community educators from throughout Wisconsin who are interested in building skills in the areas of youth garden education, development, and management.” The skills they learned were brought back to the rest of the ORE Green Team and then applied to the curriculum-enhancing activities that have been or will soon be implemented at the school.

At this point in time only a few teachers utilize the outdoor space at Orchard Ridge. Though every grade participates in the planter box project so far only teachers who are a part of the ORE Green Team bring their students outside. The first year of the program was about getting teachers and students outside and trying to get them comfortable in a new learning space. The Green Team hopes that all teachers will soon include GBOE in their Student Improvement Plans (SIP) in addition to their curriculum. They hope to get students outside, teach them about citizenship and healthy living, and help students understand why these foods that they can grow
themselves are good for them. With the updates planned for the upcoming school year teachers will hopefully feel more comfortable bringing their students outside for all types of classes including reading, math, art, and more.

**Future of Garden**

The Orchard Ridge Green Team is in the process of acquiring permission from the school board, and later the state board, for more outdoor classroom expansion. Emily Feistel has submitted a request to complete the three-year plan created by the Green Team. The first year of the plan was dedicated to food and its incorporation into the outdoor classroom. Edible crops were planted in the planter boxes, fruit trees and berry bushes were planted, and Orchard Ridge was accepted to the USDA Fresh Fruit and Vegetable Program in which the REAP Food Group brings fresh snacks for the entire school three days a week. This program helps keep kids excited about their food and where it comes from all year long. Parents have even noticed their children’s increased interest in trying new fruits and vegetables. Every week the teachers receive an email informing them of where the fruit and vegetables came from and how those specific ones are good for you. The teachers also understand that healthier students learn better and have noticed improvement in their students. There is a possibility that the school may decide to participate in themed planting next year where each box contains edible plants that can be used in pizza, salad, salsa, tea, and other meals.

The ORE Green Team’s plan for the second year focuses on the forest shared by Orchard Ridge and Toki Middle School and monitored by the Wisconsin DNR. The five-acre forest is home to trillium and bluebell flowers along with some invasive species in addition to the birds and other wildlife that appear throughout the year. Ducks and mosquitoes are attracted to the forest by the vernal spring that forms during the rainy season. The Green Team would like to
build bait boxes and insert cameras so that students can observe animals that are more shy and do not leave their hiding places when students are present. The plan also includes utilizing the various tree species to help teach students to identify different trees in and around the forest. The plan is so thorough that it even includes using the fallen trees and branches in art projects throughout the school year.

The third year of the plan is dedicated to creating a sensory garden in the courtyard outside of the school. It will be a quiet space dedicated to reading time and teaching students observation skills. Students and teachers will plant a Zen garden that promotes calm, peaceful thoughts and will be made up of plants that attract pollinators. This part of the outdoor classroom will give teachers another useful tool in which they can help students with sensory development. With the help of volunteers they will build benches to be used for reading time or for active teaching opportunities outdoors. In addition, the teachers hope to add a white board to the side of the shed (a second shed, not the one by the boxes) to be used for outdoor lessons.

All of these efforts will lead to an expansive and interactive outdoor classroom that will improve students’ learning and behavior. Outdoors time has even lead to better grades at other schools in the district. One teacher at Lincoln Elementary has recorded noticeable improvements in her students’ math grades, test scores, and behavior during class. For a few minutes at the beginning of the period she brings her students outside for short walk during which they can expel energy and regain focus.

The Art in the Garden grant is in the planning process as well. Joshua Ludke has been working with students, parents, and community members to begin creating an outdoor performance space for Orchard Ridge. The space will include a stage made up of tiles created by students with each grade’s tiles representative of their grade-specific sea-related mascot and
leftover blue swimming pool tiles from the renovation being done at the nearby Ridgewood pool. The stage will also include the Orchard Ridge logo with their mascot, a dolphin. Mr. Ludke hopes that this project will bring organizations throughout the community together with the goal of providing the entire community with access to another form of art expression. Drama and theater are usually incorporated into other parts of the curriculum and lack the proper resources for further development. It is important for students to learn how to express themselves and this theater space will begin to provide them with a method to do so. Mr. Ludke is also proud of the Art in the Garden initiative to use all parts of the garden. After the edible plants have been harvested and the others begin to wilt he encourages students to use what’s left of the garden in art projects done indoors during colder weather.

Transition from Garden to Outdoor Classroom

Orchard Ridge has worked hard to transition their outdoor education system from one that solely focuses on gardens to one that incorporates all aspects of the outdoors thus creating the outdoor classroom. This transition is important because it leads to “student engagement which will then lead to student achievement and closing the gaps with learning” (E. Feistel, 3/20/2015). It takes more than just a garden to help students understand the importance of their education. “If students are excited about learning and we’re bringing those real life experiences into things they have to learn anyway…if we’re taking those standards and skills in a way that’s meaningful and engaging, I think we’ll naturally see that improvement in student achievement” (E. Feistel, 3/20/2015). The outdoor classroom is one the best ways to go about creating this improvement and achievement.

Garden Use in the Summer
The Orchard Ridge outdoor classroom is also used during the summer. Summer school teachers and students use the outdoor space for activities and help weed the garden. They are able to enjoy the vegetables planted in the planter boxes which students during the regular school do not have access to. This is an issue that the Green Team would like to address. They are searching for plants that can grow quickly, in eight to 12 weeks, so that students can enjoy them before they leave for the summer. There will then hopefully be some additional that the summer school students can do to enjoy the boxes.

This summer Mrs. Feistel hopes to have students create a large sign welcoming community members to Orchard Ridge Elementary’s school garden. The sign will encourage neighbors to come and enjoy the garden and to pick the edible plants when they are ripe. She also hopes to create a connection with other community gardens located on Leland, Balsam, and Russet so as to include them in a neighborhood “garden trail.”

Madison School and Community Recreation (MSCR) is also a part of the ORE summer school GBOE program. They send volunteers to water and weed the garden during the summer to help the students who use the garden.

**GBOE and the Community**

The community surrounding Orchard Ridge is what has made turning the hopes and dreams of the Orchard Ridge Green Team into reality. Donations of all kinds of materials and time from churches, banks, hardware stores, community pools, neighbors, parents, and the students themselves have contributed to creating an outdoor classroom that is easy to use and open to all. Julie Jarvis, a gardener and designer in the community, has volunteered her time to help the school plan out the rest of their outdoor classroom. Community members have already been invited to use the forest and the Green Team is currently in the process of deciding how to
go about harvesting the plants that are ready to be eaten a various times throughout the summer.
They are currently in favor of letting anyone from the community come and take what they
would like as soon as it’s ready to be picked.

The Green Team greatly values feedback from students, parents, and the community.
They want to give students choices with regard to what goes on in the outdoor classroom so they
have and will continue to distribute surveys asking for opinions and feedback on previous ideas.
A couple times per year the Green Team attends PTO meetings to update parents on what’s been
happening thanks to the GROW grant and other contributions. The team has received praise and
support for what they do from the PTO.

*Final word count: 2612*
Appendices

Site visit – 3/20/2015

- Interview with art teacher, Joshua Ludke
  - Notes:
    - 4K has own garden box, separate from K-5 boxes, and strawberry plant on a hook
      - Box made of cedar wood – long lasting and weather resistant?
      - Kids brought out mulch for area surrounding the box
    - Forest is monitored by WDNR
    - GROW grant money bought supplies for garden beds
    - A lot of art in the garden
    - Lincoln Elementary
      - Human sun dial made of tiles – stand in middle and look at shadow
      - Path through forest with boulders for students to walk through and be able to refocus before math class
    - Winter can be difficult to go outside because low-income and homeless students might not have warm enough clothing
    - Being introduced to fruits and veggies at school encourages kids to try them and many enjoy them!
  - Tour of outdoor classroom (garden beds, fruit trees/bushes, forest, and future Zen garden)
    - At the end of the school day Teach Me How to Bucky was played over the PA system!
    - Water spigot and equipment shed located next to garden beds, trees, and bushes
    - Bulbs planted next to fence
    - Pumpkin, watermelon, blackberry, raspberry plants
    - Focus on Outdoor Classroom instead of just on the garden
      - Step 1: Food – berries, vegetables, fruits (and flower)
      - Step 2: Forest (shared with the Toki Middle School)
        - 5 acres
        - Use things fallen to forest floor for art projects
        - Contains vernal spring (pond) with mosquitos and occasionally ducks
        - Want to put in bat boxes and cameras to track critters
        - Trillium and bluebell flowers (and some invasives) in the springtime
        - Woodpeckers, other birds, sometimes coyotes
        - Want kids to help identify tree species
      - Step 3: Sensory garden in the courtyard
- Quite space, Zen garden, plants that attract pollinators, benches for reading outdoors
- Interview with kindergarten teacher, Emily Feistel
  - Submitted plan for the forest to the school board for approval
    - If approved in June then it is sent to the state for approval

Photos taken on 3/20/2015

Top left: planter boxes and fruit trees
Top right: gardening shed
Bottom left: fruit trees
Bottom right: water spigot
Top left: teepee in forest
Top right: courtyard – future Zen garden
Bottom left: mulch path in forest
Bottom right: log benches in forest
Blurb about the GROW grant taken from the Orchard Ridge Elementary website:

“In September, Orchard Ridge Elementary School, along with four other Dane County schools, was selected to participate in the Growing Outdoor Classrooms Program aimed at promoting engaged learning, healthy food choices, and community engagement in area schools. The Madison Community Foundation (MCF) is funding the project with a $350,000 grant over 3 years, during which time fifteen Dane County schools will design, install and grow their outdoor classrooms or school gardens, engaging community members, students, families and teachers in new ways. Each selected school receives $8000 towards their outdoor classroom/garden build and technical/program support, expert resources, and complimentary sustainability workshops from the Grass Roots/Outdoor Wonder (GROW) Coalition, which includes the Community Action Coalition, Community GroundWorks, the Madison Metropolitan School District, Sustain Dane and UW Extension.”

Additional Sources of Information

https://accountability.madison.k12.wi.us/school-data-snapshot?id=14
https://orchardridge.madison.k12.wi.us/node/54
http://www.orepto.com/school-information.html
http://titleone.dpi.wi.gov/
http://sage.dpi.wi.gov/
https://orchardridge.madison.k12.wi.us/orchard-ridges-school-garden
http://www.communitygroundworks.org/resources/workshops-and-courses