Union County Education Foundation Grow Grant Application

Western Union Elementary School

The budget list and table below include the individual projects with construction materials and the prices required to build the outdoor classroom. Each project is also support by grade level aligned academic standards.

Please continue to read below the budget list and table for written responses to the questions outlined in the grant application. Some responses were shortened in the online application due to limited space.

Budget for Outdoor Classroom
Total Cost of the items below $4,898.50
Remaining $101.50 used to cover additional shipping fees, tax, or needed building materials

1. Garden Beds: (flowers, plants, soil, vegetables, gardening tools, gardening shed)

$1184.52 total plus tax
Items Needed:
Material to make 6- 10ft x 4ft x 16in vegetable/flower beds :
Wood 2 x 8 x 10: 6 per bed= 36 total $9.57 per board (Lowes) = $344.52
4 x 4 x 10 Post: 3 total $15.77 per post(Lowes)= $47.31
Soil: One load of topsoil: $100.00 (Blue Max)
Tomato plants: 1pk(50 seeds) $5.19 (Burpee.com)
Pumpkin seed: 1pk (50 seeds) $6.99
Flower seed: 1pk (50 seeds) $6.99 marigolds, sunflower 1pk $5.19,
Snap peas: 1 pk 300 seeds $5.19
Radishes: 1 pk $4.19
Carrots: 1pk 1,000 seeds $3.19
Turnips: 1pk 5,000 seeds $4.19
Collard greens:1 pk 350 seeds $4.19
Lavender: 1pk $1.50
Aquaponics garden:
2 Rubbermaid Structural Foam stock tanks, 100 gallon 2 $84.99 = $169.98
Storage shed/gardening tools(Lowe's)-$475.90 total

1. storage shed- $174.30
2. Tools-shovels-$24.98 x 4
3. Spade-$34.98x2
4. Rake-$17.98 x 4
5. Fan rake- $7.48 x 4
6. Watering cans-$4.98x 6

2. Paint
Total: 120.02 (Lowe's)

3. Interactive Sound
Total: $75.00
PVC Pipe: Prices vary depending on size and length- typically between $1.00 and $15.00/piece
Recycled Materials: Tin Cans, Sticks, Bamboo, Buckets…
Nails: about $5.00/pound

2X4's (8ft)- $4.00/each

4. Weather Tools
Total: $97.65 (inclusive of tax)
Cost Proposal (all inclusive of tax):
Thermometer $3.18 (Lowes)
Barometer $25.74 (Walmart)
Anemometer $34.49 (Walmart)
Wind Vane $19.99 (Amazon)
Rain Gauge $4.25 (Lowes)
2X4's (8ft)- $4.00/each

5. Webcam
Total: $249.00
Amazon
Motion Activated WebCam
6. Butterfly Garden
Total: $78.57 with tax
Butterfly Garden Flowers
1. Phlox is a low-growing, spreading plant that forms a blanket of blooms all summer. ($8 per 2.5 qt plant at Lowes)
2. Coneflower (Echinacea) Coneflower is one of the best flowers for attracting butterflies. ($11 per gallon plant)
3. Lantana ($7 per 2.5 qt plant)
4. Bluestar ($8 per 2.5 qt plant)
5. Pot Marigolds ($7 per 3 qt. plant at Lowes)
6. Black-Eyed Susan ($11 per 1 gallon plant)
7. Blazing Star Flowers ($10 per 50 pack of bulbs)
Food for Larvae:
1. Dill -$1.59/packet of seed
2. Fennel- $1.99/packet of seed
3. Parsley- $7.99/ plant
4. Milkweed- free

7. Compost
$156.73 plus tax = $167.31
(Lowes) Item # 371415 Model # EZCJR-STA
Compost Wizard 7-cu ft Recycled Plastic Tumbler Composter

-Compost Wizard tumbler composter allows you to effortlessly turn material so it's well-mixed, producing nutrient-rich compost

-Black recycled plastic construction ab-sorbs heat and offers 7-cu ft of usable capacity

-Breather holes allow for proper air circulation, so organic matter breaks down quicker

8. Outdoor Chalkboard

Total: $1,660.03
-42 x 72 $645.99 (2 boards)- $1379.19 (Billyboards)
-4 X 4 boards for mounting (4 total)- $67.34
-4 bags of quickcrete- $213.50

9. Pavers
Total:$169.00 per case of 12 (Lowes)
24 x 24 inch pavers

10. Sails
$98.40 (Amazon)

11. Greenhouse
Total: $999 (plus tax)
Grandio Element Walk-In Greenhouse Kit (6x8, Flat Mount, Wood Anchors) (Amazon)

Project/Topic Teacher Lead	Standard	Price Range
-Garden Beds: Flowers, plants, soil, vegetables -Hollie Davidson	<u>Standards Related to Garden Beds + Additional Research</u> additional standards apply Kindergarten: Science K.L.1.2 Compare characteristics of living and nonliving things in terms of their: - Structure - Growth - Changes - Movement - Basic needs K.P.2 Understand how objects are described based on their physical properties and how they are used. K.P.2.1Classify objects by observable physical properties (including size, color, shape, texture, weight and flexibility). K.E.1 Understand change and observable patterns of weather that occur from day to day and throughout the year. K.E.1.1 Infer that change is something that happens to many things in the environment based on observations made using one or more of their senses. Social Studies: K.E.1 Understand basic economic concepts.	$1179.33 total plus tax Items Needed: Material to make 6- 10ft x 4ft x 16in vegetable/flower beds : Wood 2 x 8 x 10: 6 per bed= 36 total $9.57 per board (Lowes) 4 x 4 x 10 Post: 3 total $15.77 per post(Lowes) Soil: One load of topsoil: $100.00 (Blue Max)  Tomato plants: 1pk(50 seeds) $5.19 (Burpee.com) Pumpkin seed: 1pk (50 seeds) $6.99 Flower seed: 1pk (50 seeds) $6.99 marigolds, sunflower 1pk $5.19, Snap peas: 1 pk 300 seeds $5.19 Radishes: 1 pk $4.19 Carrots: 1pk 1,000 seeds $3.19 Turnips: 1pk 5,000 seeds $4.19 Collard greens:1 pk 350 seeds $4.19 Lavender: 1pk 1.50$

	K.E.1.1 Explain how families have needs and wants. K.E.1.2 Explain how jobs help people meet their needs and wants. K.G.2 Understand the interaction between humans and the environment. K.G.2.2 Explain ways people use environmental resources to meet basic needs and wants (shelter, food, clothing, etc.). First Grade: Science: 1.L.1 Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive. 1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment. 1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world. 1.L.1.3 Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there (e.g., reuse or recycle products to avoid littering) 1.L.2 Summarize the needs of living organisms for energy & growth. 1.L.2.1 Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth. Social Studies: 1.G.2 Understand how humans and the environment interact within the local community. 1.G.2.1 Explain ways people change the	Aquaponics garden: 2 Rubbermaid Structural Foam stock tanks, 100 gallon 2 $84.99  Storage shed/gardening tools(Lowe's)-$475.90 total 1. storage shed- $174.30 2. Tools-shovels-$24.98 x 4 3. Spade-$34.98x2 4. Rake-$17.98 x 4 5. Fan rake- $7.48 x 4 6. Watering cans-$4.98x 6  

	environment (planting trees, recycling, cutting down trees, building homes, building streets, etc.). 1.G.2.2 Explain how people use natural resources in the community. 1.G.2.3 Explain how the environment impacts where people live (urban, rural, weather, transportation, etc.). Third Grade: Science: 3.L.2 Understand how plants survive in their environments. 3.L.2.1 Remember the function of the following plant structures as it relates to the survival of plants in their environments: *Roots - absorb nutrients *Stems - provide support *Leaves - synthesize food *Flowers - attract pollinators and produce seed for reproduction. 3.L.2.2 Explain how environmental conditions determine how well plants survive and grow. 3.L.2.3 Summarize the distinct stages of the life cycle of seed plants. 3.L.2.4 Explain how the basic properties (texture and capacity to hold water) and components (sand, clay and humus) of soil determine the ability of soil to support the growth and survival of many plants. Other Ideas for growing systems made with donated or recycled materials:	
-Seating Pam Gillard Amber Gordon	Tree Stump Seating	$120.02 Paint: Link- X 4 Labor/ Service: (Community will donate wood and service to cut stumps.)

		
-Sound (PVC pipe) Amber Gordon	2.P.1.1- Illustrate how sound is produced by vibrating objects and columns of air. (K-5).ML.1-Apply the elements of music and musical techniques in order to sing and play music with accuracy and expression. (K-5)ML.3- Create music using a variety of sound and notational sources. (K-5)MR.1- Understand the interacting elements to respond to music and music performances.	$75.00 PVC Pipe: Prices vary depending on size and length- typically between $1.00 and $15.00/piece Recycled Materials: Tin Cans, Sticks, Bamboo, Buckets… Nails: about $5.00/pound 2X4's (8ft)- $4.00/each
-Weather Tools Martin Hughes Ashley Erb	5th Grade Standard: 5.E.1.2 Predict upcoming weather events from weather data collected through observation and measurements. Students know that one can collect and compare weather data in order to predict the likelihood of a particular weather condition occurring. Students know how to read basic weather instruments: thermometer barometer anemometer wind vane rain gauge Students also can identify atmospheric conditions (presence and type of clouds [stratus, cirrus, cumulus], fronts) that are associated with predictable weather patterns. Students can make basic weather predictions using these skills. 2.E.1.4	Total Proposal: $97.65 (inclusive of tax) Cost Proposal (all inclusive of tax): Thermometer $3.18 (Lowes) Barometer $25.74 (Walmart) Anemometer $34.49 (Walmart) Wind Vane $19.99 (Amazon) Rain Gauge $4.25 (Lowes) 2X4's (8ft)- $4.00/each

	Recognize the tools that scientists use for observing, recording, and predicting weather changes from day to day and during the seasons.	
-Web Cam Miranda Thomas	1.L.1 Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive. 1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment. 1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world. 1.L.1.3 Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there (e.g., reuse or recycle products to avoid littering)	Total: $249.00 Amazon Motion Activated WebCam
-Butterfly Garden Jennifer Deering	K.L.1.2- Compare characteristics of living and nonliving things in terms of their: - Structure - Growth - Changes - Movement - Basic needs 1. 2.L.1.1- Summarize the life cycle of animals including: - Birth - Developing into an adult - Reproducing - Aging and death 1.L.2.2- Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth. 2. 2.L.2.1- Identify ways in which plants and animals closely resemble their parents in	Total: $78.57 with tax Butterfly Garden Flowers 1. Phlox is a low-growing, spreading plant that forms a blanket of blooms all summer. ($8 per 2.5 qt plant at Lowes) 2. Coneflower (Echinacea) Coneflower is one of the best flowers for attracting butterflies. ($11 per gallon plant) 3. Lantana ($7 per 2.5 qt plant) . 4. Bluestar ($8 per 2.5 qt plant) 5. Pot Marigolds ($7 per 3 qt. plant at Lowes) 6. Black-Eyed Susan ($11 per 1 gallon plant)

	observed appearance and ways they are different. 3. 2.L.2.2- Recognize that there is variation among individuals that are related. 3.L.2.1- Remember the function of the following plant structures as it relates to the survival of plants in their environments: *Roots - absorb nutrients *Stems - provide support *Leaves - synthesize food *Flowers - attract pollinators and produce seed for reproduction. 3.L.2.2- Explain how environmental conditions determine how well plants survive and grow. 4.L.1.1- Give examples of changes in an organism's environment that are beneficial to it and some that are harmful. 4. 2.L.1.2- Compare life cycles of different animals such as, but not limited to mealworms, ladybugs, crickets, guppies or frogs. 5.L.2.2- Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or decomposers (biotic factors). 5.L2.3- Infer the effects that may result from the interconnected relationship of plants & animals to their ecosystem.	7. Blazing Star Flowers ($10 per 50 pack of bulbs) *Altogether, this is $62. Food for Larvae: 1. Dill -$1.59/packet of seed 2. Fennel- $1.99/packet of seed 3. Parsley- $7.99/ plant 4. Milkweed- free
-Composting Jennifer Dobbins	Composting <u>Standards</u> and <u>Research</u> K.L.1.2 Compare characteristics of living and nonliving things in terms of their: - Structure - Growth - Changes - Movement - Basic needs 1.L.2.1	$156.73 plus tax = $167.31 (Lowes) Item # 371415 Model # EZCJR-STA Compost Wizard 7-cu ft Recycled Plastic Tumbler Composter -Compost Wizard tumbler composter allows you to effortlessly turn material so it's well-mixed, producing nutrient-rich compost

	Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth. Students know plants are living things that need energy and grow. Students know plants need to take in water, nutrients and light (to make their own food) for energy and growth. 1.E.2.1 Summarize the physical properties of earth materials, including rocks, minerals, soils and water that make them useful in different ways. 1.E.2.2 Compare the properties of soil samples from different places relating their capacity to retain water, nourish and support the growth of certain plants. 3.L.2.4 Explain how the basic properties (texture and capacity to hold water) and components (sand, clay and humus) of soil determine the ability of soil to support the growth and survival of many plants. Students know that different soils possess different textures and capacities for the retention of water and nutrients. Students know that soil consists of different components. Students know that these characteristics of soil influence the growth and survival of plants. 4.L.1.3 Explain how humans can adapt their behavior to live in changing habitats (e.g., recycling wastes, establishing rain gardens, planting trees and shrubs to prevent flooding and erosion). Students know that humans can adapt their behavior in order to conserve the materials	-Black recycled plastic construction ab-sorbs heat and offers 7-cu ft of usable capacity -Breather holes allow for proper air circulation, so organic matter breaks down quicker

	and preserve the ecological systems that they depend on for survival. 5.L2.3- Infer the effects that may result from the interconnected relationship of plants & animals to their ecosystem.	
-Outdoor chalkboard/mural Despena Combs	Support academic instruction for all grade levels.	Total: $1,660.03 -42 x 72 $645.99 (2 boards)- $1379.19 -4 X 4 boards for mounting (4 total)- $67.34 -4 bags of quickcrete- $213.50 Outdoor Chalkboard
-Pavers Hollie Davidson	Support academic instruction for all grade levels.	Total:$169.00 per case of 12 24 x 24 inch pavers
-Sails to provide shade and protection Ashley Erb	Support academic instruction for all grade levels.	Sails Link $98.40
-Greenhouse	Supports all standards related to garden beds.	$999 Grandio Element Walk-In Greenhouse Kit (6x8, Flat Mount, Wood Anchors) (Amazon)
		Total Cost - $4,898.50

WHAT'S YOUR BIG IDEA TO GROW YOUR STUDENTS?

Western Union Elementary is invested in growing students by building an outdoor classroom in our school courtyard. An outdoor classroom will increase opportunities for project based learning (PBL) lessons and strengthen student engagement. By engaging students with project based learning curriculum students are asked to solve real-world problems and challenges, resulting in a deeper knowledge of the subject matter. Furthermore, project based learning encourages students to connect to curriculum and collaborate to create solutions to help their community.

The outdoor classroom will also provide interdisciplinary learning opportunities for students including environmental-science, related arts, math, and language art. Western Union Elementary is considered to be within the Parkwood cluster which places an emphasis on STEM (Science, Technology, Engineering, and Math). Learning opportunities with the outdoor classroom will expose students to more STEM projects as they will work to build and maintain an outdoor garden, monitor weather tools, and observe animal life with web-cams and butterfly gardens. These are just a few of the projects we intend to put in place overtime.

As a school we believe students feel empowered when they can connect with what they are learning, collaborate to solve problems, and create solutions. With an outdoor classroom students will have many opportunities to live out this mission as teachers design curriculum to empower students through project based learning. When students are invested in what they are learning they take ownership of their learning yielding greater content understanding. With the outdoor classroom we aspire for our students to grow in their responsibility and desire to learn.

WHICH COMPONENTS OF EMPOWERED DOES YOUR PROJECT ADDRESS? EXPLAIN WHY

By creating and sustaining an outdoor classroom students will be exposed to the three main components of the Empowered Framework; “Connect, Collaborate, Create”. We believe the framework aligns with our main goals of providing opportunities for students to connect to the curriculum, collaborate to solve real-world problems, and be a part of creating innovative solutions.

With an outdoor classroom, teachers will have additional resources to use as a part of their instruction to connect and engage students with meaningful experiences and design lesson aligned to the standards. As a part of our project proposal we have created a table outlining the different projects we intend to implement over time. The table includes standards and grade level alignment. One example from that table is we plan to build

garden beds to grow flowers and vegetables. The garden beds can be utilized by many different grade levels in various subject areas. However, a a fifth grade teacher planning a unit on volume could use the garden beds as a launching point for the unit.

To begin the unit students could go to the garden beds and measure the perimeter and and height of the beds. From there the teacher could have students use this collected data to review perimeter and area asking questions about how the measurements for length and width could be utilized? Once the teacher has assessed the student prior knowledge she could then ask questions about why the height measurement is necessary?

Students would then collaborate to answer the question and develop theories, possibly create solutions for using the height measurement to create a formula to calculate the volume of the garden bed. Therefore, without any prior knowledge of volume the teacher will have connected and engaged students by having them solve a real-world problem. Using the outdoor classroom as a launching point for the volume unit provides the teacher a legitimate connection for students. This same lesson could be facilitated without an actual garden bed, however having an outdoor classroom where students can collaborate to create solutions empowers the students giving them ownership of what they are learning.

In order for learning to be meaningful students need to be able to apply and make connections about what they are learning beyond the classroom. Therefore, by having an outdoor classroom teachers will have access to a venue to facilitate lessons and expose students to the standards with purpose. The outdoor classroom also creates a flexible setting for elementary students to naturally collaborate and investigate. We want to utilize students questions and wonders to drive instruction, an outdoor classroom makes that a possibility.

HOW WILL THE FUNDS BE USED? WE SUGGEST A MINIMUM OF 100 WORDS IN THIS FIELD.

- See Chart Below

WHAT ARE THE GOALS AND OBJECTIVES FOR THIS PROJECT?

By constructing and maintaining an outdoor classroom on our school campus, our goal is to empower teachers and students with opportunities for project based learning in an outdoor setting. Furthermore, the outdoor classroom will improve student responsibility and overall citizenship as we hope to positively impact the local community.

An outdoor classroom creates a space for teachers to be innovative in curriculum design to better engage and empower students. Students need learning opportunities to improve and challenge their 21st century learning skills such as critical thinking, creativity, and communication. Teaching outside of the traditional classroom enhances those opportunities to make learning more relevant. Please see the table below with the various projects and the standard alignment that we plan to implement over time. We believe learning the standards through real life application will result in deepening student content knowledge.

Furthermore, at Western Union we have students who learn in the Behavior Focus Class setting (BFC). These students require additional supports and small class sizes to help them meet their behavior goals. According to the National Center for Biotechnology Information, "There is growing evidence to suggest that exposure to natural environments can be associated with mental health benefits. Proximity to green space has been associated with lower levels of stress (Thompson et al., 2012) and reduced symptomology for depression and anxiety (Beyer et al., 2014), while interacting with nature can improve cognition for children with attention deficits (Taylor and Kuo, 2009) and individuals with depression (Berman et al., 2012)." All students would benefit from increased project based learning opportunities in the outdoor classroom however, the students in the Behavior Focus Class setting could reap therapeutic benefits as well.

A large component of project based learning is challenging students to use learning experiences to give back to their communities. Therefore, as teachers our goal is to use the classroom as an additional learning space for

students to give back to the community. Some ideas include but are not limited to; growing flowers to donate to the local hospital or use as beautification for those in need, grow vegetables, and host nutrition awareness nights for the parents and families, and use the classroom as a part of global night to teach the community about what students have been studying from various cultures around the world.

WHAT IS YOUR PLAN OF ACTION? HOW DO YOU PLAN TO MAKE THIS PROJECT A REALITY?

As a team we have delegated specific parts of the project amongst the various team members. Each team member is responsible for overseeing a project. In preparation for the grant they researched the project finding out costs, standards alignment, and beginning to plan for implementation. The grant team created a timeline outlining the construction of the outdoor classroom and the individual projects. By delegating projects and having a specific timeline the project will be properly managed. The team will meet twice a month at least during construction and once a month following construction to discuss progress.

Post construction the team will create a digital platform for classroom teachers to sign up to reserve the outdoor classroom and provide feedback/questions. Having representatives throughout the majority of the grade levels will improve communication as well. The team plans to seek out professional development opportunities to support the growth of the project. Potential professional development includes, visiting schools that have outdoor classrooms, participating in a book study, and seeking outdoor education learning opportunities.

By delegating projects and establishing a strong team of people committed to the success of the project we will adhere to the timeline created by the group to make the project a reality. Furthermore, continuing our education by seeking out professional development opportunities will ensure the ongoing success and growth of the project.

HOW DO YOU PLAN TO SUSTAIN YOUR PROJECT AFTER THE 2019-2020 SCHOOL YEAR?

In efforts to sustain the project in years to come, the grant team plans to utilize various clubs at the school, reach out to the local middle and high school for volunteer service hours, meet as a team throughout the school year to assess progress and needed maintenance, and utilize the local experts in the community/PTO.

Western Union Elementary has many clubs that meet throughout the school year. The following clubs have a service component in their mission; Junior Beta Club, Caring Through Crafting Club, and Girls on the Run. These clubs will be able to help with the general maintenance of the outdoor classroom such as weathering, painting a mural, beautification efforts etc. Also the school will have a Gardening Club organized and supported by members of the grant team. The Gardening Club will be responsible for maintaining the plants and vegetables in the garden that is a part of the outdoor classroom.

Collaborating with the local middle and high school will provide additional support for maintenance and expansion on the outdoor classroom. Our Junior Beta Club Advisor is a member of the grant team and has strong connections with the teachers at the local schools. We also plan to utilize the Future Farmers of America (FFA) club, and the students in the industrial arts classes at the high school who are studying subjects such as botany, construction, and shop.

We also plan to reach out to the community for their support in maintaining and growing the outdoor classroom. The team already has the support of our school's PTO (attached is a letter from Western Union's PTO president). The PTO has been responsible for hosting school beautification nights, and organizing outdoor projects for students on Earth Day. Having an active PTO will enable the team to establish more connections within the community. In addition, the Charlotte Woodworkers Association has agreed to help with the construction of the project and assist with the ongoing upkeep of all structures. Board member, David Powles is

our point of contact with the Charlotte Woodworkers Association. He can be reached at 704-506-0403 and he resides within the county at 3719 Newtown Road, Waxhaw, NC 28173. Members of the grant team also have connections with local community members involved in the farmer's market, feed store, landscaping, construction businesses, and independent farming.

Most importantly the team of people responsible for designing this grant is fully committed to maintaining and growing an outdoor classroom for our students. We have ten teachers on this planning team spanning across grade levels and content areas. Furthermore we have the full support of our principal, Kristi Williford. The teachers at this school are committed to Western Union and its success. More than half of the members on the team either currently have their personal children enrolled at Western Union or they were previously enrolled. The level of commitment the teachers of this school have to Western Union makes a difference in the quality of their teaching and dedication to the people in this community. We will meet regularly to monitor the growth and success of the outdoor classroom to fully meet the needs of our students.

Letter from Western Union Elementary PTO President:

To whom it may concern,

The PTO (Parent Teacher Organization) of Western Union Elementary would like to show our support for an Outdoor Classroom for our existing courtyard. It falls directly in line with our Superintendent Dr. Andrew G. Houlihan's vision of creating an atmosphere of emotional health and wellness amongst students in our county. Western Union Elementary School is a family-oriented educational community, with a great relationship between school staff, parents and community members. We have successfully been caring for our outdoor courtyard with a collaboration of teachers, parents and students. Our students take pride in the outdoor elements of the school property and the PTO believes students would greatly benefit from a space that is dedicated to as

an outdoor classroom. Learning in an outdoor environment would enhance our student's creativity, love of science and emotional well-being.

We will help support and maintain the outdoor classroom with our beautification projects, and also from the support of our parent volunteers. We will work collaborate with the staff to ensure the design is something that falls within our means of maintaining and sustaining.

Please feel free to call or email me with any additional questions. jennybrzuchowski@yahoo.com

704-242-4945

Thank you,

Jenny Brzuchowski

Western Union Elementary School

PTO President

WHAT IS YOUR TIMELINE FOR EXECUTING THIS PROJECT?

Start Date	End Date	Project
May 2019	June 2019	Order all necessary materials. Grant Team meets to access progress
June 2019	August 2019	Build garden beds. Lay Pavers Paint Stumps Hang Sails Install Weather Tools Install Sound Garden Install Chalkboards Grant Team meets to access progress
August 2019	September 2019	Planting at PTO Beautification Day Garden Club Planting Stump/Pavers Fundraiser Grant Team meets to access progress Classes begin to access and utilize outdoor classroom.
October 2019	November 2019	Harvest Vegetables WUES Nutrition Night-Community Outreach

		Grant Team meets to access progress
December 2019	January 2020	Winterize the garden Grant Team meets to access progress
January 2020	February 2020	Grant Team meets to access progress
March 2020	April 2020	Spring Planting PTO Earth Day planting Grant Team meets to access progress
May 2020	June 2020	Harvest Flowers to donate locally Grant Team meets to access progress
June 2020	August 2020	Revisit projects and plan for the new year Grant Team meets to access progress

- Building and grounds modification form approval of any construction
- ADA handicap accessible

HOW WILL YOU EVALUATE THE PROJECT EFFECTIVENESS?

As noted in the table aforementioned the grant team plans to implement specific projects aligned to standards first. Students will be given pre and post-tests on these specific standards after completing a unit in which the outdoor classroom was utilized.

For instance, if students in second grade were completing a weather unit, the second grade teachers would have students complete a pretest aligned to standard 2.E.1.2, “Students know that numbers are used to describe air temperature, wind speed, and the amount of precipitation that occurs. Students know that wind direction is described using cardinal directions (N, S, E, W) and numbers. Students know how to measure air temperature with a thermometer, wind direction with a windsock or vane, wind speed with an anemometer, and precipitation with a rain gauge.” The pretest would assess students prior knowledge of weather tools and their use in determining the weather. Then following the unit the teachers would reassess students knowledge with a post test.

By utilizing pre and post tests teachers will be able to gauge the effectiveness of their instruction and the impact of instruction in the outdoor classroom setting. Pre and post tests will be aligned to the standards and monitored from year to year to reflect and assess areas for improvement or potential needs for professional development.

We also plan to utilize a community survey with the support of our school's PTO. This survey will help us to determine whether the community believes students are benefiting from the outdoor classroom, receive feedback for areas of potential growth, and learn of any additional interest in volunteering to improve the classroom.

HAS YOUR PRINCIPAL APPROVED THIS REQUEST?

Kristi Williford approves our grant proposal, she is an active member of the committee. The following teachers are active members of the grant team as well, Ashley Erb, Hollie Davidson, Miranda Thomas, Jennifer Deering, Pam Gillard, Jennifer Dobbins, Martin Hughes, Despena Combs, Tracy Vassil, Amber Gordon.