

# Sustainable Jersey for Schools Certification Report

This is the Sustainable Jersey for Schools Certification Report of George L. Catrambone Elementary School (Monmouth), a Sustainable Jersey for Schools silver certified applicant.

George L. Catrambone Elementary School (Monmouth) was certified on August 18, 2017 with 485 points. Listed below is information regarding George L. Catrambone Elementary School (Monmouth)'s Sustainable Jersey for Schools efforts and materials associated with the applicant's certified actions.

## **Contact Information**

The designated Sustainable Jersey for Schools contact for George L. Catrambone Elementary School (Monmouth) is:

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## **Actions Implemented**

Each approved action and supporting documentation for which George L. Catrambone Elementary School (Monmouth) was approved for in 2017 appears below. Note: Standards for the actions below may have changed and the documentation listed may no longer satisfy requirements for that action. Additionally, points associated with actions prior to 2013 certifications may not be accurate.

## **Board Leadership & Planning**

## **Professional Development for Sustainability**

5 Points

😤 Bronze Priority 😤 Silver Priority School District

Program Summary: This year Long Branch was privileged to send teachers, and administrators

to a 6 hour training for Sustainable Jersey Schools! The session were held in December and January by NJASBO in their Trenton offices. On Day 1, we sent 6 participants, and Day 2 we sent 7 participants. We also have two board members attend training at the school boards convention in Atlantic City along with the School Business Administrator. Of course, Dr. Salvatore, the Superintendent of Schools was part of the presentation, which made it easy to get board members to attend! We are also enrolling 2 board members for online courses to become Green certified this year! We also have two schools enrolled in Power Save Schools this year - and we had 8 people attend that training as well. Our Physical Education Supervisor attend a week long conference in Boston focused on Physical Education and students movement. Finally, we had the Business Administrator attended several classes at NJASBO convention last fall. There are many other examples of sustainable Professional Development, but these are the examples we were able to document easily.

EXCEL: PROFESSIONAL DEVELOPMENT SUMMARY PDF: <u>POWER SAVE INFO</u> PDF: <u>SHAPE PHYSICAL EDUCATION CONFERENCE</u> IMAGE: <u>NJSBA TRAINING TWEET</u>

## **District Sustainability Policy**



District

**Program Summary:** The Long Branch Public Schools embarked on an environmental and sustainability change over three years ago when we started our Energy Management program. Since then we have installed solar panels on 8 schools and implemented green initiatives district wide. Our policy includes our desire to conduct operations and make decisions with identified sustainability priorities that include, as a minimum: protecting students, staff, and community from environmental harm; preparing students for the future by educating for sustainability (knowledge of concepts and practices of environmental, social, and economic responsibility and sustainability); and intent to preserve current and future resources.All District policies are posted on the school website in a searchable database providing access to all staff and the community.

WORD: <u>DISTRICT SUSTAINABILITY POLICY DOCUMENTATION</u> WORD: <u>SUSTAINABILITY POLICY WEBSITE SEARCH</u> : <u>WAVE SAFETY BULLETIN</u> PDF: <u>OCTOBER BULLETIN ANNOUNCING POLICY</u>

## **Climate Mitigation & Renewable Energy**

## **School Carbon Footprint**



😫 Bronze Priority School District

**Program Summary:** Long Branch School District uses EnergyCAP to track and manage electricity, natural gas, and water usage. Scope 1 emissions from combustion of natural gas as well as Scope 2 emissions from purchased electricity were gathered from the EnergyCAP system.

Mileage data for each vehicle in the fleet was collected. It was then converted to gallons of fuel consumed using the Fuel Economy Factors provided by GHG Protocol (a project of the World Resources Institute). The resulting value, representative of fuel consumed by the entire district's fleet, was allocated to each school according to known values of students who ride the bus from each school. Because this is a new school, calculations were based on July 1, 2014 - June 30, 2015 fiscal year, unlike the other schools in the district. Bus data was therefore unavailable for this year, but will be included going forward.

EXCEL: SCHOOL CARBON FOOTPRINT DOCUMENTATION

**Diversity & Equity** 

## **Breakfast After the Bell**



School District

**Program Summary:** Free Breakfast is offered to all students at the George L Catrambone School daily. At GLC, students are able to enter their class at the start of the day and can choose a free balanced, healthy Breakfast at their desks. All Kindergarten through Second Grade students are offered breakfast after the bell daily and eat in their classrooms. Third through Fifth grade students are able to eat in the cafeteria each morning and it is continued after the bell until all students have been offered breakfast. The cafeteria supplies a variety of hot and cold healthy breakfast food choices. Meal choices include fresh fruits, cereal, milk, juice and crackers as well as Waffles, pancakes, muffins or yogurt as an alternative. Menus are provided on our website monthly so that parents are made aware of what is offered each day. In order to promote our program we sent flyers out and included it on our webpage. Our food service provider is very active in all community events especially the Wellness Fair to promote breakfast and make parents and their students aware that breakfast is offered for free and how important breakfast is to the education of our students.

PDF: <u>BREAKFAST AFTER THE BELL DOCUMENTATION BREAKFAST MENU</u> EXCEL: <u>BREAKFAST AFTER THE BELL DOCUMENTATION RECORDED BREAKFASTS SERVED</u> PDF: <u>BREAKFAST AFTER THE BELL DOCUMENTATION FEBRUARY BREAKFASTS</u> WORD: <u>BREAKFAST AFTER THE BELL DOCUMENTATION PHOTOS</u> PDF: <u>BREAKFAST AFTER THE BELL LETTER TO FAMILIES</u>

## **Energy Efficiency**

**Energy Audit** 



😤 Bronze Priority 😤 Silver Priority School

Program Summary: In 2017, Long Branch School District had a Local Government Energy Audit

(LGEA) completed by TRC through the New Jersey Clean Energy Program. It included all school locations as well as the board office. The George L Catrambone school was included in the audit event though the school is only 4 years old. TRC Energy Services evaluated 12 measures which together represent an opportunity for George L. Catrambone Elementary School to reduce annual energy costs by roughly \$47,226 and annual greenhouse gas emissions by 452,030 lbs CO2e. We estimate that if all measures were implemented (including the PV System), the project would pay for itself in roughly 20.0 years, with individual measure paybacks ranging from <1 year to 27 years. The breakdown of existing and potential utility costs after project implementation are illustrated in Figure 1 and Figure 2, respectively. Together these measures represent an opportunity to reduce George L. Catrambone Elemented, (excluding the PV System) the project will pay for itself in roughly 11.4 years. Together these measures represent an opportunity to reduce the school's annual energy use by 15%. This summer the district will evaluate which schools are a priority to determine how the ESIP will proceed.

#### PDF: LG ENERGY AUDIT DOCUMENTATION

## **Building Efficiency Measures**

#### 20 Points

😤 Bronze Priority 🔮 Silver Priority School

Program Summary: Long Branch Board of Education hired Cenergistic in 2011 to help identify potential savings. We hired a full-time Energy Manager that actively tracks and monitors utility usage at every building. Part of that program includes tracking With EnergyCAP, you can track any energy or non-energy commodity and any type of bill detail. We enter bills manually using bill entry templates. EnergyCAP provides two different views—finances and facilities—so you can view and report both data types separately. EnergyCAP PowerViews and reports provide a clear picture of each account/meter's cost and consumption history for months or years in graphical or tabular format The George L Catrambone School was built with LEEDs for Schools Design guidelines. The building is new - only two years old, and has high efficiency equipment, glazed windows, etc However, while analyzing the bills, we were able to identify areas for improvement. The school demonstrating a 30% energy use reduction, 17% in energy savings, and achieved a nearly \$43K annual reduction in energy costs. The school went from almost 154 in energy use intensity (EUI) to 116 EUI in a single year!. Key changes included efforts to update and properly uses the school's energy management system (EMS) and promoting simple behavioral changes as such turning lights off when not in use and unplugging appliances. We also updated the schedules for heat and air conditioning. We also found all exhaust fans running 24/7 and fresh air intake was also running throughout the night. Finally, we reduced the temperatures in the hot water loop to also reduce energy costs. And we received ENERGY STAR RATING for the first time in 2016!! We scored 79!

EXCEL: <u>BUILDING EFFICIENCY MEASURES DOCUMENTATION</u> PDF: <u>BUILDING EFFICIENCY MEASURES DOCUMENTATION</u>

## **Energy Tracking & Management**

#### 10 Points

School District

**Program Summary:** Long Branch Public Schools embarked on a large and successful energy savings program district wide with Cenergistic, Inc nearly 4 years ago. We hired a full-time Energy Manager that actively tracks and monitors utility usage at every building. Part of that program

includes tracking With EnergyCAP, you can track any energy or non-energy commodity and any type of bill detail. We enter bills manually using bill entry templates. EnergyCAP provides two different views—finances and facilities—so you can view and report both data types separately. The two data hierarchies are also hyperlinked, which makes it easy to jump between accounts, buildings, and meters. By helping you correlate cost and consumption information, EnergyCAP provides granular and summary level data from both perspectives for powerful analytics that yield actionable insights. EnergyCAP PowerViews and reports provide a clear picture of each account/meter's cost and consumption history for months or years in graphical or tabular format.

IMAGE: <u>GLC EELCTRIC BILLS</u> IMAGE: <u>GLC GAS BILLS</u> PDF: <u>13 MONTH BILL REPORT 2016</u> PDF: <u>ENERGY MANAGEMENT CONTRACT WITH CENERGISTIC</u> IMAGE: <u>DASHBOARD FOR 48 MONTHS</u> WORD: <u>ENERGY TRACKING BILL PROCESSING</u>

## **Food & Nutrition**

## **Healthy Food Choices Beyond the Cafeteria**

## 10 Points

School District

Program Summary: The Long Branch Public Schools continues to have policies in place for supporting healthy food choices. We removed all soda machines from schools in 2010 and only allow healthy choice snacks for fund raisers as well as classroom events like Halloween and Birthdays. At the start of every school year, a letter is sent home, or the School Handbook is posted online to review the guidelines for snacks and food students are allowed to have in school. The Long Branch Schools contracts with Sodexo for our food programs in the schools. The Sodexo staff members are committed to promoting good nutrition, getting the students to choose and try new healthy options on their lunch trays, to stop and think about the path that food takes from the field to the table, and to ENJOY what they are eating! This is a list of what we have done and do on a monthly basis: \*Promote and serve Fresh locally grown fruit & vegetable \*Frequent Theme days in all schools during lunch \*Health nutrition classes in classrooms \*Taste testing in all schools during lunch \* We were for 5 years to be the only school in New Jersey to receive the Gold of Distinction Award for the Healthier US School Challenge. Sodexo is promoting healthy food choices in and out of classrooms. The latest and one of their most popular programs is the Top Chef Challenge and the Elementary and Middle School level which allows the student to compete against each other providing healthy food selections that are judged by local culinary professionals and awarded prizes and recognition for their efforts. Sodexo is very active in the district.

PDF: <u>HEALTHY FOOD CHOICES BEYOND THE CAFETERIA TOP CHEF 2017</u> WORD: <u>HEALTHY FOOD CHOICES BEYOND THE CAFETERIA WEBSITE LINK</u> PDF: <u>HEALTHY FOOD CHOICES BEYOND THE CAFETERIA DOCUMENTATION</u> WORD: <u>HEALTHY FOOD CHOICES BEYOND THE CAFETERIA DISTRICT POLICY</u> WORD: <u>HEALTHY FOOD CHOICES BEYOND THE CAFETERIA NUTRITION LETTER TO FAMILIES</u>

## **Promote Locally Grown Foods**



School District

**Program Summary:** Our Food service program is committed to providing and promoting locally grown foods. We provide locally grown food samples on a monthly basis to students during lunch time with special recipes. We also promote quarterly chef competitions with healthy recipes and recently, our elementary winner was selected to have her healthy salad recipe shared nationally. Long Branch purchases local foods though the USDA Fresh Fruit and Vegetable Program and our efforts to provide the most nutritious foods to our students along with food education and awareness has been recognized at both the national and local level. The Long Branch Schools contracts with Sodexo for our food programs in the schools. And the staff at Sodexo are committed to promoting good nutrition, get the students to stop and think about the path that food takes from the field to the table, and to have FUN!

PDF: NUTRITION, LOCAL FOODS AND FOOD SERVICE OVERVIEW WORD: PROMOTE LOCALLY GROWN FOODS SCHOOL WELLNESS POLICY PDF: PROMOTE LOCALLY GROWN FOODS MENU AND NEWSLETTERS PDF: FARM TO SCHOOL PROGRAM PARTICIPATION PDF: FRESH FRUIT AND VEGETABLE PROGRAM PARTICIPATION PDF: FFVP VOUCHERS: MONEY SPENT ON JERSEY FRUITS AND VEGETABLES

## **School Gardens**



Program Summary: Our school implemented the school garden program in order to give the students a hands on approach to general good nutrition as well as cultivating gardening experiences. Students are involved with selection of the location of garden plants and the varieties of plants planted. We partnered with a local representative from the organization Providing Hope to research and plan the best options for our garden variety and location. Plants were donated to the program from local farms and nurseries. An example of some of the plants include tomatoes, eggplant, peppers, cucumbers, squashes along with various herbs and other local produce. The representative worked closely with the teachers and students to explain the process of germination and the necessary ingredients to a healthy growing environment for the garden. Students will be able to harvest throughout the summer and fall with the intent to sample and donate the health produce to the families in need both in and outside of our community through local food pantries. Student representatives were selected from each grade level to learn about and assist in the planting and maintenance of the garden. Through the remainder of the school year, the summer, and into next the school year students will meet with the representative and teachers frequently to continue learning about the growth process through a hands on approach in the garden.

WORD: <u>GARDEN LESSON PLANS</u> EXCEL: <u>GARDEN PLANS MODIFIED</u> WORD: <u>GLC LETTER OF INVOLOVEMENT</u> WORD: <u>SCHOOL GARDENS HARVEST REPORT</u> WORD: <u>SCHOOL GARDENS PHOTOGRAPHS</u>

## **Green Cleaning Supplies**



School District

**Program Summary:** Long Branch Public Schools started only purchasing green cleaning supplies in July of 2015. Our cleaning products are green and our paper products support our sustainability efforts. The Green Cleaning and purchasing efforts have shown a difference with the staff through cleaning - as they are simpler and easier to utilize. We anticipate a reduction of wasted and outdated custodial product in the next few years. We used to order different cleaners for various surfaces . The staff needed more time to clean in order to change product and were inefficient. Product would sit on a shelf because there were too many items to track. The new system has two main items for cleaning thereby eliminating waste. We are utilizing the remaining supplies in one of the buildings until they are depleted, then the entire district will be cleaned with green supplies.

PDF: <u>LETTER FROM BA</u> PDF: <u>GREEN CLEANING PRODUCT INFO</u> EXCEL: <u>GREEN CLEANING SUPPLIES DOCUMENTATION</u> PDF: <u>GREEN CLEANING SUPPLIES DOCUMENTATION</u>

## **Green Purchasing**

#### **Green Purchasing Policy**

## 10 Points

😤 Bronze Priority 🔮 Silver Priority District

**Program Summary:** The Long Branch School District is dedicated to decreasing our footprint while increasing our sustainability and community awareness of conservation. A large step for this goal is to include the awareness of sustainability and conservation in all aspects of the district including purchasing. In June of 2015 the board adopted a green initiatives policy that includes green purchasing considerations whenever fiscally responsibility allows. When the board adopts the policy, the policy is posted in the board minutes for everyone to read. All District policies are also posted on the school website in a searchable database providing access to all staff and the community. Finally - We are already purchasing sustainable and energy smart appliances and equipment throughout the district!

WORD: <u>GREEN PURCHASING POLICY 7660</u> WORD: <u>GREEN POLICY ON WEBSITE POLICY DATABASE</u>

## Access to Healthy Water in Schools



School

Program Summary: In December Long Branch Public Schools start to develop a Lead Water testing plan per the Department of Education lead testing regulations N.J.A.C. 6A:26-12.4, with additional definitions at 6A:26-1.2. We developed water inventories, filter inventories, plumbing layouts and assessments in our schools. We sent announcement letters regarding the testing to staff and students and performed the tests on 450 outlets across the district on March 4 with assistance from an outside agency. 9 outlets were designated above the limits. We sent letters to 6 schools affected within 24 hours of receiving the results. We also hung signs indicating the outlets were not suitable for drinking. Also, we believed those outlets were either shut off or had low usage and not properly flushed the evening prior to the testing. So, we retested the following Saturday on March 18. 8 of the outlets came back cleared. We replaced the fixture in the final device with a certified lead free faucet and we tested the flush sample on that 9th outlet which came back with acceptable levels. We followed the regulations by appointing Project Manager which prepared all the paperwork and Project Officers who performed the water inventories and were also present during the water tests. We also posted all of the results and inventories and profiles on line on our district website. Finally, we prepared a Quality Assurance Plan which is also posted on our website. http://www.longbranch.k12.nj.us/Page/16156

PDF: ACCESS TO HEALTHY WATER IN SCHOOLS POLICY WORD: ACCESS TO HEALTHY WATER IN SCHOOLS GOODBYE PLASTIC BOTTLES VIDEO SHARING PDF: ACCESS TO HEALTHY WATER IN SCHOOLS DOCUMENTATION PDF: NJ AMERICAN WATER TEST RESULTS PDF: ACCESS TO HEALTHY WATER IN SCHOOLS DOCUMENTATION PDF: POSTERS AND PICS

## **Outdoor Air Quality Awareness Program**



School District

**Program Summary:** Understanding the importance of breathing healthy air, this year the Long Branch Public School district implemented the outdoor air quality program as modeled by www.airnow.gov in each of our 9 schools. This program allows for both our students and staff to not only understand the importance of healthy air quality but the appropriate activities that are promoted for a healthy lifestyle in each of these air quality categories. Representative of the outdoor air quality, these flags set the standard for outdoor activity in each building. Administrators, staff, and students have learned about the importance of the program and the significance of each of the flag colors. The program influences each of our students though participation in Physical Education Classes and recess activities, as well as our after school athletic sports programs. Each building has set aside designated indoor areas when necessary to allow for the continuation of gross motor play and practice. Flags are coordinated daily based on the information provided by airnow.gov displayed on our district webpage and daily emails received to many administrators, and educators in each building. Staff and students are made aware of these levels as they enter through lobbies in each building our walk by the flag poles.

PDF: OUTDOOR AIR QUALITY AWARENESS PROGRAM DISTRICT LETTER TO FAMILIES WORD: OUTDOOR AIR QUALITY AWARENESS PROGRAM DISTRICT WEBPAGE INFORMATION AND WIDGET WORD: OUTDOOR AIR QUALITY AWARENESS PROGRAM SAMPLE OF DISTRICT AND BUILDING LEVEL PROTOCOL WORD: OUTDOOR AIR QUALITY AWARENESS PROGRAM EMAIL INTRODUCING PROGRAM TO ADMIN AND STAFF

WORD: OUTDOOR AIR QUALITY AWARENESS PROGRAM PHOTOS

#### **Radon Testing, Education and Mitigation**



School

**Program Summary:** Our district continues to test Radon as a condition of providing a healthy environment for our students and staff. We performed our tests this year, in August of 2016. In 2014 the NJ Schools Development Authority built a new elementary school in the Elberon section of Long Branch. During site investigation, an old municipal clean garbage dump was identified adjacent to the school property. The NJSDA commissioned a passive radon mitigation system design for the school and the system was built under the footprint of the George L Catrambone School. In 2016, we applied for a DEP grant for Radon testing and were awarded the total costs for the testing. All results came back within normal limits and are posted on the District website under Facilities.

IMAGE: <u>RADON VENT DETAIL</u> IMAGE: <u>DETAILS OF RADON MITIGATION SYSTEM</u> IMAGE: <u>FLOOR PLAN FOR FIRST FLOOR SYSTEM</u> IMAGE: <u>FLOOR PLAN FOR SECOND FLOOR</u> PDF: <u>2016 RADON TESTING RESULTS</u>

## Learning Environment

## **Student Participation in the Arts**



District

**Program Summary:** The Visual and Performing Arts are essential for a thriving community. The overall goal of the Visual and Performing Arts department is to provide a wide variety of experiences. Students are provided the greatest opportunity for success and the developmental level of each child is considered when selecting activities. Creative thinking, problem solving and critical thinking skills are nurtured throughout each course. Our purpose is to enhance the strengths of the students while creating awareness, building self-esteem and fostering leadership skills. The Long Branch Public Schools provide a plethora of opportunities for students to be engrossed in enriching arts programs both during and after school. The past few years the arts courses have been infusing the importance of sustaining our natural resources with the standards for each content area in order to promote global awareness of protecting our environment. Attached is a list of community activities the district was involved in with regards to the arts,

letters from the Superintendent stating the courses and highly qualified teachers in our district, as well as the NJ School Report for the Visual & Performing Arts in our schools.

IMAGE: <u>NJ SCHOOL REPORT</u> IMAGE: <u>LBMS NJ SCHOOL REPORT</u> WORD: <u>STUDENT PARTICIPATION IN THE ARTS DOCUMENTATION</u> WORD: <u>STUDENT PARTICIPATION IN THE ARTS DOCUMENTATION</u>

## **Student & Community Outreach**

**Green Team** 

10 Points

😫 Bronze Required School District

Program Summary: The District Green Team was appointed by the Board of Education in November of 2015. The Green Team meets monthly at the Middle School to discuss recent activities. The Middle School Team focused on activities drawn from the Model Program Initiative which included many of the activities noted in our submission from recycling, to gardens, to evaluating the building and surrounding site plans. The team has also become the driving force to create gardens and awareness at all school levels including adding a "Green Theme" to other school activities. Most recently, the Green Team organized a District Wide Green Fair showing Sustainable Art, we expanded our Gardens into two more schools, built a Greenhouse from recycled plastic bottles, established aeroponic gardens inside each school. We support the efforts to the outside gardens as well as new initiatives i.e. air quality monitoring, additional professional development for staff, and one additional district employee dedicated 50% to sustainability efforts! Finally, each school has submitted requests for support for sustainable projects we are supporting through PTA funding, district funding, or district support through the labor of staff. We continue to promote awareness of local food needs while bringing the students together with the community. We have also reported needs to the administration to add bottle filling stations which will continue this summer to all schools, and promote LED light replacement in main use areas when funds are available. The diversity of the team has been essential in getting action in areas district-wide. LED lights are already being considered, and water filling station upgrades will take place this summer in all of our cafeteria areas. We are also starting to build a greenhouse made of water bottles collected by students! Our second Annual Report was presented by the Superintendent of Schools to the Board in June.

PDF: <u>ANNUAL REPORT VOLUME 1</u> PDF: <u>ANNUAL REPORT VOLUME 2</u> PDF: <u>LETTER FROM SUPERINTENDENT</u> PDF: <u>CERTIFIED MINUTES</u>

## **Community Education & Outreach**

#### 10 Points

😤 Bronze Priority 😤 Silver Priority School

Program Summary: In partnership with the Alliance to Save Energy and New Jersey Natural Gas,

our school is promoting sustainability literacy through educating students, parents, members of the school board and school district, and community members through student presentations, energy saving assemblies, career day or earth day events such as the energy hog assembly, and the end of the year presentation from members of the community and the staff . Students participating in the PowerSave Team developed an end-of-year presentation illustrating what they have learned, strategies implemented for energy efficiency, and how the school district can help further the school's efforts through renewable resources, better insulation, updated HVAC systems, etc. Students participating in the PowerSave Team worked with the Alliance to Save Energy Local Project Leader Vera Figueiredo and NJ Natural Gas representative to host the Energy Hog Assembly for the student body and community members. The Energy Hog Assembly illustrated where schools waste the most energy and strategies that can be implemented in school/home to reduce energy waste.

IMAGE: COMMUNITY EDUCATION & OUTREACH DOCUMENTATION WORD: COMMUNITY EDUCATION & OUTREACH DOCUMENTATION WORD: COMMUNITY EDUCATION & OUTREACH DOCUMENTATION





School

Program Summary: On April 26, 2017 our schools hosted a Green Fair at the Long Branch Middle School. Each School highlighted their partnerships with the community by bringing in a strategic partner with vested interest in sustainability at the local level. In addition to inviting a partner, each school contributed to the fair by displaying student projects and sending a member of their Green Team to represent their school at the event. Students were encouraged to reuse "waste" materials in their art work when creating their displays. Also on display was the artwork of the Earth Day Poster Contest winners, sponsored by the Long Branch Environmental Commission. We sought to maximize event efficiency and attendance by hosting the fair at a centralized location. Student exhibitions educated hundreds of guests as the Green Fair took center stage during a board meeting night where the district's green and sustainability efforts were recognized with the following awards: Energy Excellent Award from Cenergistic Very Impressive Produce Award from NJ Bureau of Child Nutrition New Jersey Green Ribbon Award from NJSBA Energy Star Award The event proved to be a step in the right direction towards the school's sustainability goals in the community. The general consensus was one of positivity and enthusiasm! This collaborative effort was made possible by each school and the following partners and community organizations: Sodexo, JCP&L, New Jersey Natural Gas, Clean Ocean Action, Monmouth County Climate Coalition, Cenergistic, the Long Branch Environmental Commission, Transition Monmouth and the Surfers Environmental Alliance of Long Branch.

## PDF: <u>QUALITATIVE ASSESSMENT - GLC</u> PDF: <u>PUBLICITY AND COMMUNITY OUTREACH</u> PDF: <u>GREEN FAIR DOCUMENTATION</u>

## "Green" Your Green Fair or School Event



School

Program Summary: During our 16th Annual District Art show our student artists showcased the

importance of conserving power and energy and the impact it can have globally. In order to lessen the footprint and environmental impact of hosting this event, the district was intentional about implementing green practices in logistics and marketing. During the event, guests learned about the importance of conserving power and energy through beautiful student exhibitions. Having successfully carried out our vision for this event, we're excited to explore even more green strategies and ideas that would further advance our sustainability goals.

PDF: 'GREEN' YOUR GREEN FAIR OR SCHOOL EVENT DOCUMENTATION

PDF: <u>'GREEN' YOUR GREEN FAIR OR SCHOOL EVENT DOCUMENTATION</u> PDF: <u>PUBLICITY AND COMMUNITY OUTREACH</u> PDF: <u>PROJECT SUMMARY</u>

## **Green Challenges**



School

**Program Summary:** Our school has initiated Green Challenges through the PowerSave Schools program this year. PowerSave students are leading energy saving efforts by engaging teachers and staff with Holiday Break Shutdown/PowerDown Challenges. A few days before Thanksgiving, Winter, Spring, and Summer break each classroom is provided with a checklist of easy ways to help the school save energy during the extended break. Also, the teams are leading an Energy Patrol Contest which tracks school energy efficiency through weekly classroom audits. The goal of the Energy Patrol Contest is to encourage teachers and students to use strategies suggested by the PowerSave Team to reduce energy waste throughout the school day. The contest promotes a culture of energy savings which, over time, becomes the expectation. The PowerSave Team tracks points earned through graphs and spreadsheets. Points will be illustrated through the school webpage or a score sheet posted in a central location. At the end of the school year, the classroom with the most energy efficiency points wins a prize. Through these actions we saved a total of 11.9% of power usage from last year. See the attached video https://www.youtube.com/watch?v=jgyBr1gCm6s&feature=youtu.be

WORD: <u>GREEN CHALLENGES DOCUMENTATION</u> PDF: <u>GREEN CHALLENGES NEWSPAPER</u> PDF: <u>GREEN CHALLENGES PATROL CONTEST RESULTS</u> WORD: <u>GREEN CHALLENGES POWERSAVE ANNOUNCEMENTS AND CONTEST</u> WORD: <u>GREEN CHALLENGES END RESULTS AND PHOTOS</u>

## **Civic & Stewardship Volunteer Initiatives**



School

**Program Summary:** The students at GLC have been working on innovative ways to help the environment and reduce the carbon footprint we leave behind. As a team they came up with a plan to stop using plastic straws up in the cafeteria both at breakfast and lunch. They also have taken the project home to influence others to stop using straws as well. After hearing from the experts at Clean Ocean Action, the saw the impact discarded and littered straws make on the oceans and beaches right in our own backyards. They saw a seagull's stomach opened and the volume of plastic waste that it held, they saw turtles and sea life eating these straws in the ocean and heard of home many turtles died from this each year. Our students wanted to make a change

and help protect sea life and seabirds everywhere. They worked hard influencing and convincing other students and members of the school to give up one of the top 10 pollutants to our shores. Today students in our school walk right past the straw bin in the cafeteria without the temptation to use a straw. They know these plastic tools cause more harm than good lasting forever with little to no way to recycle them. In addition to the Just say no to Straws, students will work with the New Jersey Natural Gas for the 14th annual Ocean Fun Day at Sandy Hook on May 21 to present all of their work with saving energy here at GLC School. Their exhibit is interactive and spreads an energy saving message of Last Out Lights Out! The students had a great time spreading their message and encouraging families to save energy at home. They are already planning next years presentation and are hoping to bring the energy hog costume to remind families that wasting energy can be avoided with 3 simple ideas. Last Out Lights Out, closing windows and doors when HVAC is on, and unplugging or using power strips to shut off appliances when not in use. They passed out book marks attached below to help families remember!

WORD: <u>CIVIC & STEWARDSHIP VOLUNTEER INITIATIVES JUST SAY NO TO STRAWS VIDEO SHARE</u> PDF: <u>CIVIC & STEWARDSHIP VOLUNTEER INITIATIVES OCEAN FUN DAYS</u> PDF: <u>CIVIC & STEWARDSHIP VOLUNTEER INITIATIVES OCEAN FUN DAYS PHOTOSS</u> WORD: <u>CIVIC & STEWARDSHIP VOLUNTEER INITIATIVES DOCUMENTATION</u> PDF: <u>CIVIC & STEWARDSHIP VOLUNTEER INITIATIVES STRAW PARTICIPATION DOCUMENTATION</u> PDF: <u>CIVIC & STEWARDSHIP VOLUNTEER INITIATIVES OCEAN FUN DAYS LETTER OF EVIDENCE</u> <u>DOCUMENTATION</u>

## **Enrichment Programs through Partnership**



School

**Program Summary:** For the 2016-2017 year, our school is working in partnership with the Alliance to Save Energy (ASE) to implement the PowerSave Schools program. This partnership was developed through 3 entities: New Jersey Natural Gas, Alliance to Save Energy, and Sustainable Jersey. Through this partnership, students learn how to manage an energy audit, work with classmates and adults to implement energy efficient strategies, and meet with the ASE Local Project Leader to help facilitate the PowerSave Schools program. By participating in the PowerSave Schools program, our school has learned behavioral strategies to reduce energy waste. This partnership has helped promote a culture of energy savings as the norm rather than the exception. The PowerSave Schools program has fostered a long-term impact for a less wasteful school.

PDF: ENRICHMENT PROGRAMS THROUGH PARTNERSHIP LETTER OF PARTICIPATION PDF: ENRICHMENT PROGRAMS THROUGH PARTNERSHIP POWER SAVE ROAD MAP GUIDE WORD: ENRICHMENT PROGRAMS THROUGH PARTNERSHIP POWER SAVE STUDENT SCHEDULES PDF: ENRICHMENT PROGRAMS THROUGH PARTNERSHIP POWERSAVE APPLICATION WORD: ENRICHMENT PROGRAMS THROUGH PARTNERSHIP POWERSAVE PHOTOS

#### Student Learning

**Education for Sustainability Kindergarten** 



## School

**Program Summary:** The Kindergarten classes at the GLC School have learned and studies climate change and the effect it has on animal habitats in the arctic. Immersed in the environment of polar bears, these students have read books, recreated their habitat using children made props and decorations and dramatized their habitats. They have learned facts about these majestic animals and have even looked for ways to help rescue them and protect what is left of their natural habitats. Using the Magic Tree House book "Polar Bears Past Bed Time" by Mary Pope Osborn, children's natural curiosity took over. They have not only become the experts in polar bear knowledge, they have begun to teach other students and staff in the building to join their cause of saving them. Students participated in this project based learning approach and covered many CCCS standards in Language Arts and Writing, Mathematics, Science, and Social Studies.

PDF: EDUCATION FOR SUSTAINABILITY KINDERGARTEN LESSON PLAN PDF: EDUCATION FOR SUSTAINABILITY KINDERGARTEN LESSON PLAN AND PHOTOS PDF: EDUCATION FOR SUSTAINABILITY KINDERGARTEN EFS QUESTIONNAIRE PDF: EDUCATION FOR SUSTAINABILITY KINDERGARTEN WORK SAMPLES AND RUBRICS WORD: EDUCATION FOR SUSTAINABILITY KINDERGARTEN CCSS

## **Education for Sustainability 1st Grade**



School

**Program Summary:** This year all first grade students at the GLC school (165 students) participated in The SunWise School Program used in addition to the Project Lead the Way Launch Sun, Moon, And Stars Unit. The SunWise School Program is an environmental and health education program that aims to teach children and their caregivers how to protect themselves from overexposure to the sun. Through the use of classroom-based, school-based, and community-based components, SunWise seeks to develop sustained sun-safe behaviors. PLTW Launch Sun Moon and Stars program Teaches students about the Sun and UV Rays in addition to the moon and the stars. Students participated in a variety of activities to test the harmful UV rays. From stories and activities to testing mystery UV Frisbee and beads for bracelets, these students left school armed with ways to check for UV rays and ways to protect their skin. As a culminating project students build and designed playground models that were protected from the suns harmful rays to allow for optimal outdoor recess time!

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PDF: EDUCATION FOR SUSTAINABILITY 1ST GRADE LESSON PLANS AND STUDENT ACTIVITIES
PDF: EDUCATION FOR SUSTAINABILITY 1ST GRADE STUDENT WORK PHOTOS
PDF: EDUCATION FOR SUSTAINABILITY 1ST GRADE PHOTOS
PDF: EDUCATION FOR SUSTAINABILITY 1ST GRADE PROJECT RUBRICS
PDF: EDUCATION FOR SUSTAINABILITY 1ST GRADE EFS QUESTIONNAIRE
WORD: EDUCATION FOR SUSTAINABILITY 1ST GRADE DOCUMENTATION
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## **Education for Sustainability 2nd Grade**



**Program Summary:** This year second grade students at George L. Catrombone School started the school year discussing what they would do daily to recycle in the classroom. Students learned the importance of throwing recyclable items in the right cans throughout the day in school. During the fall students and teachers worked outside on the school grounds to not only learn about the sustainability of garden life but to collect and dispose of trash and items that needed to be recycled. Science lessons during the year focused on the life cycle of a plants and how this will link to the sustainability of the gardens in the courtyard as well as recycling projects to keep the outdoors clean and unpolluted. Students continued with the recycling theme throughout the year while collecting juice pouches in the lunch room and recycling anything they could around the school. The added additional recycling cans to teachers rooms, the art room, and even the lunch room. Students loved looking for and finding unique ways to recycle around the school. Their goal was to carry the lessons learned into their homes for the summer months.

PDF: EDUCATION FOR SUSTAINABILITY 2ND GRADE STUDENT PHOTOS PDF: EDUCATION FOR SUSTAINABILITY 2ND GRADE EFS QUESTIONNAIR PDF: EDUCATION FOR SUSTAINABILITY 2ND GRADE LESSON PLANS PDF: EDUCATION FOR SUSTAINABILITY 2ND GRADE WORK SAMPLES AND RUBRIC WORD: EDUCATION FOR SUSTAINABILITY 2ND GRADE CCSS

## **Education for Sustainability 3rd Grade**



School

**Program Summary:** The week leading up to Arbor Day, all third grade students here at the George L Catrambone School, 153 in 9 classes, learned about the impact forests and trees have on the environment. They discussed, researched, and discovered both negative and positive impacts trees and the removal of those trees have. Students learned about how they could make a difference. The joined Third graders around New Jersey and the United States to learn about the sustainability of gardening and planting trees, how deforestation has a negative impact on the environment and what we can to to help our planet stay green. While gathered as an entire class on Arbor Day, in the cafeteria, they all learned about Arbor Day and planted a Eastern Pine Tree seedling to bring home, nurture, and plant. This should bring quite a showing of Eastern White Pines to the greater Long Branch Community. The activity was followed up by students walking the grounds of our school campus to inventory and count trees. They learned how the trees we have support our environment and made suggestions on how we could better support the trees and forests of NJ.

PDF: EDUCATION FOR SUSTAINABILITY 3RD GRADE LESSON PLAN PDF: EDUCATION FOR SUSTAINABILITY 3RD GRADE PHOTOS WORD: EDUCATION FOR SUSTAINABILITY 3RD GRADE EFS QUESTIONNAIRE PDF: EDUCATION FOR SUSTAINABILITY 3RD GRADE PRESENTATION PDF: EDUCATION FOR SUSTAINABILITY 3RD GRADE WORK SAMPLES AND RUBRICS WORD: EDUCATION FOR SUSTAINABILITY 3RD GRADE CCSS

## **Education for Sustainability Grades 4-12 Arts**



Program Summary: At the GLC School, every student participats in art weekly for half the

school year. This year lessons embodied a green theme throughout. Students in various grade levels completed projects that displayed a variety of recycled materials and theme. From frogs on recycled lily pad creations, to plastic waste wind chimes, students created something spectacular from waste. Fourth and fifth grade students learned the art of printing techniques as they created printing plates from reused materials to create clear graphic prints. Up cycling at its finest. They have created beautiful signs for our courtyard garden using cast away cedar shingles and recycled bamboo rods for each planted vegetable and herb. They even made a bottle cap sign for our greenhouse. They truly make beautiful art from trash. Students have taken ownership in using these discarded materials to create unique and vibrant masterpieces from objects meant for thrash. They have taken on the responsibility of reducing them amount of trash we produce daily therefor reducing the carbon footprint we leave behind. Sample of some of the creations that have made are attached and many can be seen around the building showcasing the green effort we put forth as a school community.

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 ARTS SAMPLE LESSON PLANS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 ARTS WORK SAMPLES AND IMAGES PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 ARTS EFS QUESTIONNAIRE ART PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 ARTS ELEMENTS OF ART RUBRIC WORD: EDUCATION FOR SUSTAINABILITY GRADES 4-12 ARTS CCSS DOCUMENTATION

## Education for Sustainability Grades 4-12 Career and Technical Education

#### 10 Points

School

**Program Summary:** The PowerSave Schools program educates students about opportunities to help solve today's most pressing environmental concerns through green careers. During the PowerSave program, the school becomes a lab for students to explore energy use and efficiency as they apply STEM skills to solve a global problem. From chemistry to business, there are many ways that students can make a difference. We seek to inform students about the many careers open to individuals with a passion for environment, efficiency, and energy. Both fourth and second grade students in the PowerSave program participated in the green careers lesson study. They learned about the many types of careers available in all areas more specifically the STEAM fields. Students were amazed at the differences in these job opportunities as well as the idea that any job can essentially become greener. Their research and presentations provided us insight into their many ideas for the future. Students demonstrated proficiency in their quiz results as well as their presentation rubric scores.

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 CAREER AND TECHNICAL EDUCATION LESSON PLAN PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 CAREER AND TECHNICAL EDUCATION QUIZ RESULTS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 CAREER AND TECHNICAL EDUCATION EFS FORM WORD: EDUCATION FOR SUSTAINABILITY GRADES 4-12 CAREER AND TECHNICAL EDUCATION PHOTOS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 CAREER AND TECHNICAL EDUCATION PHOTOS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 CAREER AND TECHNICAL EDUCATION PHOTOS

## Education for Sustainability Grades 4-12 English Language Arts

#### 10 Points

School

Program Summary: As part of the reading Treasures program students discuss and explore

renewable energy sources such as wind power (wind turbines). After reading and disecting their treasures story students read an additional article about renewable resources, including wind energy and the use of turbines around the world. Following the reading, they attempted to create individual models of wind turbines after much research to replicate how they work. Students worked in teams to design, construct, and test their structures. They were evaluated based on a 4 point rubruc which is attached. This gave them hands on experience of how turbines can be useful on a much larger scale as an alternative energy source. ELA and NGSS Standards Addressed CCSS.ELA-LITERACY.RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. CCSS.ELA-LITERACY.RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. CCSS.ELA-LITERACY.RI.4.8 Explain how an author uses reasons and evidence to support particular points in a text. 4-PS3-3. Ask questions and predict outcomes about the changes in energy that occur when objects collide. 4-PS3-4. Apply scientific ideas to design, test, and refine a device that converts energy from one form to another. 4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment. 4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 ELA LESSON PLANS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 ELA EFS QUESTIONNAIRE WORD: EDUCATION FOR SUSTAINABILITY GRADES 4-12 ELA PHOTOS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 ELA STUDENT WORK SAMPLES PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 ELA RUBRIC AND ASSESSMENT PIECES

## **Education for Sustainability Grades 4-12 Health**



School

Program Summary: The George L. Catrambone School (GLC) has been busy this year with our Fresh Fruit and Vegetable Program. Here at GLC, the fresh fruit/ vegetables are delivered two days a week by volunteer students. The students do an amazing job and can't wait to do it. The GLC students look forward to their healthy snack every time they receive it. The kindergarten, first and second grade students report to our main gym every morning. To help the students remember where their class is meeting, fruit and vegetables are used. Any of the fruits or vegetables that are grown in New Jersey have the Jersey Fresh sticker on the teacher's sign. Since the fruits and vegetables are visible in the gym, the physical education teachers refer to them often, especially in October when they worked with the food services to hold a Fill your Plate with Jersey Fresh Poster contest. The GLC food services decorated the cafeteria to look like a farm with the food service workers dressed as farmers to celebrate the winners of the poster contest. A local farmer was invited to join the students during this lunch celebration. Focus on Jersey Fresh vegetables continued in the physical education classes when the students had to do a yoga pose while holding a fruit or vegetable then balance on a balance beam while still holding or balancing that Jersey Fresh fruit or vegetable on a body part. The physical education teachers taught nutrition lessons during the National Nutrition month in March. George L Catrambone School has also provided the students with several different assemblies that have stressed the importance of eating a healthy diet to grow big, strong and healthy.

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 HEALTH LESSON PLAN SAMPLES WORD: EDUCATION FOR SUSTAINABILITY GRADES 4-12 HEALTH SCORING RUBRIC PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 HEALTH EFS QUESTIONNAIRE PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 HEALTH PHOTOS AND STUDENT EVIDENCE PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 HEALTH STUDENTS WORK SAMPLES

## **Education for Sustainability Grades 4-12 Math**



School

**Program Summary:** As a fourth grade math lesson students calculated the amount of energy saved at the GLC School for this year compared to last year. These fourth grade students on the PowerSave team used utility bills from the gas and electric companies to calculate our total usage of energy over the course of 9 months of school and compare them to the bills from the previous school year. They calculated a percentage saved of 11.9% for this year compared to last year over 9 months of school (September through May). The results were connected to their work educating staff and students about how to save energy in the classrooms and around the school. Simply by using the slogan Last Out Lights Out, weekend and holiday break shut downs, and keeping windows and doors closed while HVAC was is use they were able to see the savings. Students were amazed at the 11.9% of total savings and cant wait to save even more next year. They have plans for signs on lights and reminder announcements to encourage more students and staff to participate in the project. https://youtu.be/jgyBr1gCm6s Begin at 4:19 for energy saving results

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PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 MATH LESSON PLAN

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 MATH RUBRIC AND STUDENT SCORES

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 MATH LEARNING ABOUT ENERGY SAVED PROJECT

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 MATH EFS QUESTIONNAIRE

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 MATH GAS AND ELECTRIC BILL SAMPLES

WORD: EDUCATION FOR SUSTAINABILITY GRADES 4-12 MATH CCSS DOCUMENTATION
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## **Education for Sustainability Grades 4-12 Science**



School

Program Summary: In fourth grade at the George Catrambone School, students spend the year learning about energy and how it affects us individually, as a community, state, nationally and globally. They research clean renewable approaches to Energy and compare them with nonrenewable ones. Students experiment with different types of energy following a yearlong STEM curriculum and address the sustainable energy supply and use based on a problem based learning approach. They take steps towards reducing the amount of energy used in schools and home. Energy, and the conversion of energy to different forms, is all around you. Many of the devices we use every day convert electricity to usable forms of energy such as light and heat. Students learn about this conversion of energy as well as the conversion of a variety of fuel sources from stored energy to usable electrical energy. First, students review concepts of potential and kinetic energy. Next, students learn about forms of energy including thermal, light, nuclear, chemical, electrical, and mechanical. Students then learn about the conversion of energy between forms and the energy transfer required to move energy from place to place. After students have explored energy conversion and transfer, they are presented with a design problem involving how they can change the views of the school and city and ways they operate with cleaner renewable approaches to energy consumption. Part of this problem is for students to design a wind powered car that can travel a distance of at least 5ft to a finish line as fast as

possible. They are able to use any collected recycled material to complete this task. Essential Questions Students will keep considering: 1. How are energy conversion and transfer related? 2. How can humans use energy conversion and transfer to meet needs and wants? 3. How is usable energy converted from resources in your area? 4. What are some energy conversions that take place to create usable energy in a community? 5. How can we make sure of educate people so that this usable energy is renewable and has a cleaner and more responsible and positive impact on the environment.

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SCIENCE EFS QUESTIONNAIRE PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SCIENCE LESSON PLANS SAMPLE PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SCIENCE GRADED RUBRIC SAMPLE PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SCIENCE UNIT OVERVIEW SAMPLE PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SCIENCE PHOTOS AND SOCIAL MEDIA WORD: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SCIENCE CCSS DOCUMENTATION

## **Education for Sustainability Grades 4-12 Social Studies**

#### 10 Points

#### School

**Program Summary:** After reading the story, A Clean City: The Green Construction the book by Robyn C. Friend and Judith Love Cohen, students explored the built environment and its role in their lives. They identified the types of buildings in their community and worked together to create an idea of what homes and businesses look like compared to what they would look like in a "Green City." The book was written to help our youngest generation learn how they can participate in helping to preserve our Earth. This book tells the exciting story of how architects and builders have been working hard to consider the impact on the environment and the need for sustainability (green architecture and green construction) that go into the choices made when a new building is designed. Green Construction and Architecture involves reduction in size, reuse of valuable resources and recycling of materials so that future generations will enjoy the Earth as we have. They created a visual project showing their knowledge of the buildings in their community and how they could become greener and have a more positive impact on the environment. This activity explains alternative building supplies and materials that are not only better for the environment but also healthier for the occupants of the building. Students will discover materials they need to construct the model of the energy efficient and renewable home, how to create a sustainable home and use their green knowledge to build a model of this home. 4th -5th Social Studies Education for Sustainability Common Core Standards covered in Lessons 4th - 5th Social Studies 6.1.4.C.1 People make decisions based on their needs, wants, and the availability of resources. 6.1.4.C.9 Availability of resources affects economic outcomes. 6.1.4.C.12 Creativity and innovation affect lifestyle, access to information, and the creation of new products and services. 6.1.4.C.14 Economic opportunities in New Jersey and other states are related to the availability of resources and technology. 4th - 5th Technology 8.1 Educational Technology (Word | PDF) All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge. 8.2 Technology Education, Engineering, Design and Computational Thinking - Programming (Word | PDF) All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, ELA Presentation of Knowledge and Ideas: CCSS.ELA-LITERACY.SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace. CCSS.ELA-LITERACY.SL.4.5 Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes. CCSS.ELA-LITERACY.SL.4.6 Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use

formal English when appropriate to task and situation. (See grade 4 Language standards 1 here for specific expectations.) CCSS.ELA-LITERACY.SL.5.4 Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace. CCSS.ELA-LITERACY.SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. CCSS.ELA-LITERACY.SL.5.6 Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation. (See grade 5 Language standards 1 and 3 here for specific expectations.) Science 3-5-ETS1-1 Engineering Design Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost. Performance Expectation

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SOCIAL STUDIES LESSON PLANS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SOCIAL STUDIES LESSON PLANS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SOCIAL STUDIES EFS QUESTIONNAIRE PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SOCIAL STUDIES PHOTOS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SOCIAL STUDIES RUBRIC GRADED WORK PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 SOCIAL STUDIES PLANNING SAMPLES

## **Education for Sustainability Grades 4-12 Technology**

10 Points

School

**Program Summary:** Students in fourth and fifth grade have worked together to collect film, pictures, plan and create videos to spread the message of the green events going on at the George L Catrambone School. From eliminating single use plastic bottles, to recycling and waste audits, juice pouch creations, the building of the greenhouse, and even giving up straws our students have been busy this year. They wanted to have a way to present their hard work to everyone. They are proud of the work they have done to help the school receive the Federal Green Ribbon and cant wait to share the message. These videos were presented to the community at our holiday concerts and other family events throughout the year. They are played as commercials before the events start and during any intermissions. The videos we have made together can be found on the youtube links below. The Recycler: - https://youtu.be/nHpFDwtqmNo The GreenHouse - https://youtu.be/3W0-EWpRaSY GoodBye Plastic Bottles - https://youtu.be/NcFxdEqKKaA Just Say No to Straws - https://youtu.be/Q8SX7WThZg4 Juice Pouches - https://youtu.be/HQyXpg6byTl

PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 TECHNOLOGY WORK SAMPLES PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 TECHNOLOGY RUBRICS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 TECHNOLOGY LESSON PLANS PDF: EDUCATION FOR SUSTAINABILITY GRADES 4-12 TECHNOLOGY EFS QUESTIONNAIRE WORD: EDUCATION FOR SUSTAINABILITY GRADES 4-12 TECHNOLOGY CCSS DOCUMENTATION

## **Student and Staff Wellness**

**School Wellness Council** 



😤 Bronze Priority 🔮 Silver Priority School

Program Summary: Long Branch Wellness council mission statement: Our Wellness program is a total movement experience that focuses on fun, involvement, character, self-esteem, health and fitness, and total well-being for our students. It is an essential part of every day to live long, healthy lives. Long Branch's quality Wellness program is fundamental for our students. Wellness is that phase of education which is concerned with the teaching of skills, improving physical fitness, the reinforcement of other subjects, self-discipline, leadership and cooperation, enhancing selfefficacy, stress reduction, and strengthening peer relationships. Physical activity contributes much to the growth, development, and the general well-being of every individual. Some of the benefits of our quality PE/wellness program are: An opportunity to teach character traits such as sportsmanship, teamwork, cooperation, encouragement, kindness, responsibility, self-esteem, respect for others, and so much more! Our Supervisor of Health and Physical Education, and the building Wellness Councils are the heart of the program. These dedicated individuals take on additional tasks, not only throughout the work day, but also after the school day is complete. Each building team meets monthly, to coordinate and prioritize events and opportunities that can appeal to all student in their buildings. The councils coordinate activities with the building principals, school nurse and other administration when needed. The Wellness programs gives students an additional area in which to excel. Students who struggle in the classroom may find increased self-respect and a new sense of admiration. Quality Wellness activities promote longterm health and wellness by making health and fitness fun and extending the active day by providing after school activities they can participate in. This past year the student ran in the student marathon - at the Jersey Marathon, Family Fun Fitness, 100 Days of Fitness, Field Day and participated in mini clinics available to All for a variety of interests, soccer, basketball, cheerleading, The goal of our entire Wellness council which includes Physical Education as well as additional Wellness Programs and after school activities is to provide activities where selfexpression, self-confidence, and physical and mental poise can be attained through perseverance and mastery of physical, mental, and social tasks. Long Branch Wellness council mission statement: Our Wellness program is a total movement experience that focuses on fun, involvement, character, self-esteem, health and fitness, and total well-being for our students. It is an essential part of every day to live long, healthy lives.

WORD: SCHOOL WELLNESS COUNCIL DOCUMENTATION WORD: SCHOOL WELLNESS COUNCIL DOCUMENTATION PDF: SCHOOL WELLNESS COUNCIL DOCUMENTATION WORD: SCHOOL WELLNESS COUNCIL DOCUMENTATION WORD: SCHOOL WELLNESS COUNCIL DOCUMENTATION

## **Programs to Promote Physical Activity**



School

**Program Summary:** In the 2016-2017 school year, George L Catrambone Elementary Schol implemented a variety of programs to increase the amount of time students are engaged in physical activity before, during and after school. Our school participates in the Alliance for a Healthier Generation Healthy Schools Program. In 2016 the school earned the Bronze National Healthy Schools Award. Specific Initiatives Include: - Brain Breaks- Brain Breaks are highly-motivating movement breaks using existing technology in the classroom. Brain Breaks are 2-5 minute activity breaks completed directly in the classroom using the room's projector or smart board. This program is in line with NJSL Standards 2.5.2.A.3 and 2.6.2.A.1, and it's a FUN,

interactive way to get kids moving and keep students engaged in the classroom. Brain Breaks bring fun into the classroom without damaging the integrity of the subject. - NJ Kids Marathon Kids Move the NJ Marathon Program: The Novo Nordisk New Jersey Marathon and Half Marathon has partnered with Novo Nordisk's Get Your Youth Moving Program (GYYM) to provide an initiative for children of all ages and abilities to experience the benefits of exercise. Goal: Children will be encouraged to complete a total of 26.2 miles (a full distance marathon) or the exercise equivalent (30 minutes per day) over the course of a 7-week period. Participants: Upon completion of specific exercise milestones, children will receive rewards for their accomplishments. On the day of the 1.2 mile finale, children will also receive a t-shirt and medal to commemorate the occasion. Schedule: The first 25 miles can be a combination of physical education class, recess activities and any other extracurricular exercise programs. The last 1.2 miles will be completed as part of the Barnabas Health Kids & Family Festival which kicks off the marathon and half marathon weekend in April. The Finale: Children will run the last 1.2 miles of the program along the marathon and half marathon course as part of the Barnabas Health Kids & Family Festival. - Mini-Clinic Program The Mini-Clinic Program is available to ALL students free of charge. The elementary schools of Long Branch are committed to providing a quality athletic program for our students. The program allows for student participation across a wide range of individual and team activities at various levels. The athletic program in our district maintains focus on fair play, participation, sportsmanship, skill-development, and fun. We believe that sports promote many positive qualities and always strive to keep those qualities as a focus for our programs. Principles of the Elementary Mini-Clinic Program: • To ensure the well-being of the student-athlete. • To ensure the well-being of all school and district athletic programs. • To ensure a program consistent with the goals of elementary education and Middle School Athletics. Overview of Athletic Mini-Clinics: • Grade 3-5 are able to participate. • Each year there will be one-two mini-clinics per sport. • Students will learn skills, drills, rules & regulations of the sport. • Students will be instructed by experts, MS Coaches. Purposes/Objectives of the Elementary Athletic Mini-Clinic Program: • To provide students with the opportunity to explore and express themselves through athletics. • To contribute to the development of school spirit. and athletics • To provide students with opportunities to learn and participate in activities that promotes healthy living. • To provide a wide range of individual and team activities and allow students of all ability levels to participate. • To allow as many student-athletes as possible to participate. • To satisfy the need to socialize and broaden student experience. • To teach the sport specific concepts • To teach the concepts of teamwork and work ethic. • To teach the concepts of fair play and sportsmanship. • To allow students to develop life-long skills and abilities.

PDF: <u>PROGRAMS TO PROMOTE PHYSICAL ACTIVITY DOCUMENTATION</u> PDF: <u>BRAIN BREAKS</u> IMAGE: <u>PROGRAMS TO PROMOTE PHYSICAL ACTIVITY DOCUMENTATION</u> WORD: <u>MINI-CLINICS</u> IMAGE: <u>PROGRAMS TO PROMOTE PHYSICAL ACTIVITY DOCUMENTATION</u>

## **Policies to Promote Physical Activity**



District

**Program Summary:** Long Branch's quality Physical Education/wellness program is fundamental for our students. Why do children need a quality PE/wellness program? The simple answer is so that they will remain physically active throughout their lifetime and reap the benefits of doing so. Quality PE/wellness provides students with a multitude of important learning experiences that cannot be duplicated in the classroom. Physical Education/wellness is that phase of education which is concerned with the teaching of skills, improving physical fitness, the reinforcement of other subjects, self-discipline, leadership and cooperation, enhancing self-efficacy, stress reduction, and strengthening peer relationships. Physical activity contributes much to the growth,

development, and the general well-being of every individual. Some of the benefits of our quality PE/wellness program are: An opportunity to teach character traits such as sportsmanship, teamwork, cooperation, encouragement, kindness, responsibility, self-esteem, respect for others, and so much more! It gives students an additional area in which to excel. Students who struggle in the classroom may find increased self-respect and a new sense of admiration from their classmates in PE. A quality PE/wellness program keeps our students healthy through participation through the program, while teaching them the basic skills needed for future fitness, athletic, and health success. A student who is physically and mentally healthy is more likely to be prepared to meet the daily challenges of living in our society, and is more likely to make appropriate choices about lifestyles. Quality PE/wellness promotes long-term health and wellness by making health and fitness fun, and by incorporating lessons on the importance of movement for overall health and disease prevention. PE reduces obesity and other health risks. Research shows that a quality PE program will increase standardized test scores. PE can be used to improve and reinforce learning across the curriculum. Quality PE involves every student, and meets every student at his or her level of ability. The goal of our program is to provide activities where self-expression, selfconfidence, and physical and mental poise can be attained through perseverance and mastery of physical, mental, and social tasks. Quality PE/wellness provides sufficient personal skills to perform a variety of physical activities, give the student a high regard for participating in regular physical activity, and gives them knowledge of the benefits, risks, precautions of involvement in physical activity, and a value for the role of a healthy lifestyle. Long Branch Physical Education and wellness program is more than running, calisthenics, or sport. It is a total movement experience that focuses on fun, involvement, character, self-esteem, health and fitness, and total well-being for our students. It is an essential part of every day to live long, healthy lives. The overall goal of the "Fitness Fever, Catch It" program is to enhance, develop and implement a comprehensive physical fitness program. This goal will be achieved through the new "Fitness Fever, Catch It" Program, which will address meeting and improving upon all NJ Core Content Standards. To meet these goals the following objectives will be implemented throughout grades six through eight students; 1. To increase fitness levels of all students. 2. To initiate an updated physical education and wellness program for grades 6-8 students, obtain necessary equipment and incorporate technology into the "Fitness Fever, Catch It" program. Action Plan- Implement a two day per week mandatory fitness days, which will incorporate nutrition values in all K-12 PE/HE classes. The LBMS staff will implement the fitness gram program. We will use these funds to purchase the program and additional technologies necessary to use the program so we can tract all students' progress. The data will be used to drive instruction for improvements as well as used for student growth objectives. All K-12 students will be tested in the fitness gram, they will then be tested in the spring of the following year (May). Results will be compared to make improvements in our fitness program for the following year. All results will be shared with students and parents. During the course of the year we will implement fitness day programs to help students increase their cardiovascular endurance, BMI and student achievement. Students will be involved in brain breaks all throughout the day, circuit training in PE classes as well as fitness games to work on their skills. We will implement a dance class as well as a yoga class, the students will also participate in dance dance revolution and you tube dance videos and contests. We will host 3 family fun and fitness nights so parents and family members can become involved in the activities. This year our field day will be themed fitness field day. We will participate in the NJ Kids Marathon which will tract their miles all throughout the year. All students will wear a pedometer to see their individual results during PE class. All data will be utilized to drive instruction throughout the year for 21st century learning. We believe that Long Branch Public Schools are; "Where Children Matter Most". With this philosophy in mind, we are certain that the "Fitness Fever, Catch It" Program will teach continuous growth and achievement for all students, without exceptions.

## PDF: POLICIES TO PROMOTE PHYSICAL ACTIVITY DOCUMENTATION PDF: POLICIES TO PROMOTE PHYSICAL ACTIVITY DOCUMENTATION PDF: <u>DISTRICT REPORT</u>

## **Staff Wellness Program**



School District

**Program Summary:** The Long Branch Schools goes above and beyond to promote staff wellness. Three years ago, they allocated capital expense to build a wellness center at the Long Branch High School providing medical support for all staff 7 days a week. The PHCLB provides all of its members' basic wellness AND medical needs under one roof of over 5000 sf, seven days a week. The health center's activities are centered around the theme of "Care for the Whole You". PHCLB is structured to provide quality wellness and health care which is easily accessible to employees of the district. Employees pay no co-pays or deductibles for any services or programs of the health center. It is open 7 days a week for 65 hours, opening weekdays from 7 AM to 6 PM and Saturdays and Sundays from 8:00-6:00 throughout the year. The wellness center is located centrally in the school district on school property making it a convenient location to all work sites. The center provides monthly newsletters, diagnostic services, as well as nutrition, chiropractic care, physical therapy and programs targeting staff wellness and activities.

WORD: <u>STAFF WELLNESS PLAN</u> WORD: <u>STAFF WELLNESS PICTURES</u> PDF: <u>NEWSLETTERS AND FLLYERS</u>

## **Student Safety**

## **Pedestrian and Bicycle Safety and Promotion Initiatives**



School

Program Summary: Long Branch Partnered with EZ Ride to offer several programs to the students regarding Bicycle and Pedestrian Safety. Each year during our Summer Program, which involves students from all three elementary schools, EZ Ride provides a Bike Rodeo and Bicycle Skills Event. A Bike Rodeo is a safety event that teaches students the basic skills needed to safely ride their bikes. Students can learn about and practice safe bicycling skills in a controlled environment. We held the Rodeos at schools during our summer program. The Rodeo included, • Pre-ride safety check • Bike sizing and helmet fitting • Bicycle handling and safety drills • Drills and information on how to interact with traffic Our students also received new bike helmets and the EZ Ride's SRTS team fit the helmet to each student. On July 29, 2015 Meadowlink provided educational incentives for students at their Walk to School Wednesday for the summer program which included students from all elementary schools. Later that same day, we held a Bike Rodeo at two different locations for all students to attend.. Educational information, bike helmets, helmet ID labels, bike reflectors were provided for free to all participants and other students who attended even if they did not have a bicycle. On July 30, 2015 we held Pedestrian Safety Presentations for all elementary students at local schools buildings between 9-11 AM for grades K-5 and from 12 - 2 pm at a second site for Grades K-5. In May of this year, we invited the SRTS team to return to the elementary schools and provide another bike safety class and a safe walking class to all the students. We also held a Bike Safety Poster Contest for each school to participate. The George Catrambone School was built in 2012. The NJSDA built a beautiful building, but this

shcool is 100% transported, unlike our other schools where some students are transported, and some are walk. When the school opened, we felt we had safety issues in the front of the school during dismissal. Our concern included student picked up by parents, could walk between large buses picking up students thereby getting hurt. So for an entire year, our bus riders walked 100 yards in all weather to load buses away from the front so parents could safely pick up children. During that year, the Board of Education invested over 500K dollars to build a second parking lot in the back which serves as a second drop off and pick up area. So today, students driven by parents are dropped off and picked up in the back, while our 1 buses safely pick up students in the front of the building.

WORD: <u>PICS OF OUR LATEST SAFETY COURSE</u> PDF: <u>SUMMER FLYERS</u> PDF: <u>EMAIL FROM SRTS</u> IMAGE: <u>POSTER WINNERS</u> WORD: <u>GLC PARKING LOT PHOTOS</u>

## Waste Reduction & Recycling

## Waste Audit

#### 10 Points

😤 Bronze Priority 🔮 Silver Priority School

Program Summary: In a school with approximately 947 students and staff members in the building, we produce a large amount of trash equal to about 96 cubic yards per month and 64 cubic yards of recycling per month. This is only about a 40% recycling rate and 0.1 cubic yard of waste per individual in our school. We can do better then that! Committed to making a change and a difference in the carbon footprint we leave behind, the students and staff here at GLC have pledged to make a change in the volume of trash and recycling produced in our building. In order to make this change, students, staff and even our principal and facilities manager volunteered to complete a trash audit throughout the building. Simply done to understand the amount of materials and waste being tossed and what we can do to make it better. Trash was collected from both the classrooms and offices as well as the cafeteria throughout the day. At the end of the day students and staff gathered in the all purpose room to dump, sort, weigh, and record what we throw out. Students literally dug in with gloves to begin the large sort. They got to work sorting by type, paper, cardboard, plastic, wrappers, food, etc... In the end the results were astonishing, we produce way to much trash. From these results our green team came together to come up with a plan. Looking for ways to reduce the amount of trash, students decided on some innovative ways to reduce the trash we dispose of as well as refine the recycling options. Hoping to implement some of these ideas soon they presented their findings to building principals.

WORD: <u>WASTE AUDIT PHOTOS</u> WORD: <u>WASTE AUDIT VIDEO THE "RECYCLER"</u> PDF: <u>WASTE AUDIT RESULTS</u> PDF: <u>WASTE AUDIT RECOMMENDATIONS</u>

**Materials Reuse** 



**Program Summary:** Each year our school runs a winter clothing drive to collect coats and other various winter clothes for families in need. Students in all grade levels as well as teachers donated these winter weather essentials to help local families. These gently worn or like new items were presented to families in need.. Hats, gloves, scarves, and other warm clothing was distributed to families in need to have during the cold months of winter. For sensitivity reasons photographs were not taken. In addition we collect uniforms that children have out grown to keep in out nurses office for students in need. These uniforms are distributed when children grow out of current sized uniforms and are in need of new one. The closet is replenished with donations from families frequently. In an additional project for materials reuse, our school ran a book swap where students could bring in already read books and swap them our for new reads. This allows for students to select reading materials for summer months in higher level ranges as well as have new stories to engage in. With 285 students participating and approximately 600 books collected students excitedly viewed and left the book swap with new exciting options. The book swap allows for old books to give joy in new hands rather then being discarded as students mature and look for additional options.

WORD: <u>MATERIALS REUSE CLOTHING DRIVE TALLY</u> WORD: <u>MATERIALS REUSE CLOTHING DRIVE FLYER</u> WORD: <u>MATERIALS REUSE BOOK SWAP</u> WORD: <u>MATERIALS REUSE BOOK SWAP PHOTOS</u>

## **Recycling Non-Mandated Materials**



School

**Program Summary:** Recycling Treasures Students here at GLC continue to collect broken crayons, and empty Capri-sun and other like juice pouches for an earth day event. Throughout this school year, these recycled treasures have been reduced, reused, and recycled into something wonderful created by the students themselves. From trash to treasure collecting over 1,948 juice pouches, they have made wallets, small bags, pencil cases and lunchboxes from the juice pouches to sell to the students on Earth-day in an effort to raise money for the gardens. Students continue to learn the importance of not only recycling but reaching beyond to create a garden of vegetables for those families in our community in need. It doesn't stop there. Students also continue to peel and prepare broken crayons to melt into new ones for the same efforts. These students will use all the proceeds from this sale to fund the garden plants and needs to benefit members of the community in need. Check out our video to learn more...https://www.youtube.com/watch?v=HQyXpg6byTl&feature=youtu.be

PDF: <u>RECYCLING NON-MANDATED MATERIALS ACCOUNTING OF MONEY RAISED</u> WORD: <u>RECYCLING NON-MANDATED MATERIALS PHOTOS</u> WORD: <u>RECYCLING NON-MANDATED MATERIALS ANNOUNCEMENTS</u> PDF: <u>RECYCLING NON-MANDATED MATERIALS DISTRICT LETTER OF SUPPORT</u> WORD: <u>GREEN POSTER</u>