

## Grants Budgetary Information

Agency: Parks and Recreation Department

Document Type\*:

Application  Award

\*Note: Legislation is not typically composed for applications. If legislation is requested for an application, please contact the Budget Analyst.

Grant

Name: STEM (Science, Technology, Engineering, Math) Partnership

Grant

Period: 2/1/17-5/31/19

Award

Amount: \$75,000 (\$25,000 per year for 3 school yrs 2016-2017, 2017-2018, 2018-2019)

Cost

Center:

Match

Required?

Yes  No

Match

Amount: \$

-

Match Cost

Center: N/A

Please fill out ONLY ONE of the boxes below. "New Grant" means this grant has not been budgeted within the current fiscal year and is a completely new revenue for the current fiscal year. "Existing Grant" means there is currently a cost center with budget established for this grant.

| New Grant Information   |              |
|---|--------------|
| Note: New grants will require a resolution be taken before Council. This process takes approximately 6-8 weeks. |              |
| Amount to be budgeted in current fiscal year:   | \$ 75,000.00 |

| Existing Grant Information  |      |
|---|------|
| Note: If the award amount is greater than the amount budgeted in LeAP, an A/R memo will need to be signed by the Mayor. This process takes approximately 2 weeks. |      |
| Current amount budgeted in LeAP:  | \$ - |
| Additional amount to be budgeted in LeAP for current fiscal year:   | \$ - |

| Routing Information                  |                        |
|--------------------------------------|------------------------|
| Name: <u>Pat Triplett/Lori Smith</u> | Date: <u>5/25/2017</u> |
| Name: <u>Freida Winkfield Shaw</u>   | Date: <u>5/25/17</u>   |
| Name: <u>Andrea Veeneman</u>         | Date: <u>5/25/17</u>   |
| Name: <u>Ben Tipton</u>              | Date: _____            |

# **Moving Forward thru STEM at California Community Center**

## **A Program for Second and Third Grade Phillis Wheatley Elementary School Students**

### ***EXECUTIVE SUMMARY***

**Moving Forward thru STEM** is an after school STEM Exploration Club offered by Louisville Metro Parks and Recreation (LMPR) at its California Community Center, to 25 second and third graders who live in the California Neighborhood and attend Phillis Wheatley Elementary School (PWES). The purpose of the program is to foster (1) a love of learning and (2) a curiosity for career opportunities through hands on STEM projects.

### **The California Neighborhood**

Louisville is ranked the eleventh poorest city in the United States. The California Neighborhood is the poorest of the poor. Statistically, only one out of 20 kids will “make it out” and achieve financial security as an adult. Sports, and specifically basketball, are considered the only “way out” by many. The California Community Center is the hub for nurturing this dream. LMPR wants to piggy back on this reputation by developing additional programs that nurture other dreams and possibilities. Moving Forward thru STEM is a perfect starting point.

### **The Keys to Success**

The success of this program must be defined within the context of the California Neighborhood. Keys to success are:

- Selecting student whose families have roots in the California Neighborhood and are likely to continue to attend PWES. Student retention is a must to achieve success.
- Attendance is key. Nurturing family involvement will help support our participants’ regular attendance. Students’ support systems will gain an understanding of “Why STEM” and make sure kids’ attendance is a family priority.
- Make the program FUN with lots of MOVEMENT, HANDS ON activities and opportunities for INDIVIDUAL SUCCESS.
- Provide Transportation – Program staff walk the 300 yards from school to the community center. Many of these families do not have transportation and will need assistance to get students home.

### **The Starting Point**

***Moving Forward*** participants will be 75% second graders and 25% third graders of Phillis Wheatley Elementary School. The students will be designated as novice, the lowest level, in reading and math testing. *Forward’s* first session will begin in February, 2017 and go thru the end of the regular school year in May. Each month will have a different theme. The students will meet Tuesdays, Wednesdays and Thursdays at the California Community Center, which is next to the school. Tuesdays and Thursdays will focus on STEM projects. Wednesdays will be enrichment programs.

### **The Request**

We are requesting \$25,000 per year for three school years from the Clariant, Inc. to fund the Club. Included in the first year funding for the 2016-17 school year is program development and the first club term running February 2017 thru May 2017. Two Club terms, one in the Fall and one in the Spring are proposed for school years 2017-18 and 2018-19 with the first group of students continuing through their fifth (5<sup>th</sup>) grade school year and a new group added each year.

# **Moving Forward thru STEM at California Community Center**

## **A Program for Second and Third Grade Phillis Wheatley Elementary School Students**

### **PROGRAM BACKGROUND**

For 18 years Clariant, Inc. has been investing in the youth of the California community through its partnership with Family Resource Center of Phillis Wheatley Elementary School (PWES) Each year the Company has grown in its mission and commitment to the students of this school and to the larger community. The development of a STEM project that focuses on the academic achievement of the students of PWES is another indicator of its commitment to their overall success. The STEM project, will be the first of a series of projects in "Move Forward" an effort by the California Community Center to help the youth of the California Neighborhood identify ways to achieve financial security as adults.

The California Neighborhood is one of the poorest in Metro Louisville which is one of the 11 poorest cities in the United States.

- The median household income is \$19,822.
- 63% of the families have incomes of less than \$30,000 a year and 30% are less than \$15,000.
- 95.47% of student body is non-white, not of Hispanic Origin
- The population is 91 percent African American.
- The Neighborhood has one of the highest crime rates in the city.

Statistically, only one out of 20 kids will "make it out" of this Neighborhood and achieve financial security as an adult. Sports, and specifically basketball, are considered the only "way out" by many. The California Community Center, where a former NBA Player and basketball All American is on staff, is the hub for nurturing this dream. LMFR wants to piggy back on this reputation by developing additional programs that nurture other dreams and possibilities. Moving Forward thru STEM is a perfect starting point.

The Science, Technology, Engineering and Math (STEM) initiative will help foster a love of learning through fun, hands-on STEM projects. Without knowing it, students will participate in a rigorous program of academics in the areas of Language Arts, Math and Science. The targeted students will be Phillis Wheatley Elementary students who are California community residents.

Phillis Wheatley Elementary School currently has an enrollment of 397 students grade Head Start (HS through 5<sup>th</sup> grades). The majority of the students live in the California Neighborhood.

Student demographics are:

- Wheatley ranks the bottom 14<sup>th</sup> percentile or all Kentucky elementary schools on measures of academic performance. It places 2<sup>nd</sup> from the bottom of both state and local school district in academic achievement based on the 2015 KPREP testing system of measurement.
- 100% of the students are receiving free lunch
- 80.3% of the students are black, 6.3% are white, and 13.4% are other

## **Moving Forward thru STEM at California Community Center**

### **A Program for Second and Third Grade Phillis Wheatley Elementary School Students**

Students in this STEM Initiative will help to create a program that is intended to be sustainable over several years. The goals for students are to:

- increase their interest in science, technology, and math
- begin to develop a working knowledge of how these skills are used in everyday life through field trips.
- begin to develop critical thinking and communication skills
- strengthen ability to work on teams to accomplish a goal
- improve their ability to read and comprehend what they are reading

Extensive research proves that after school programs enable children who are behind academically to catch up or strengthen their academic skills. Adding more academics is not enough. Children living in poverty need extended learning environments such as museums, cultural activities such as singing in choirs, dancing and going on organized excursions that reinforce the lessons being taught. Specifically, participants in well- constructed and managed programs:

- Show increased interest and ability in reading
- Develop new skills and interests
- Show improved school attendance and increased engagement
- Take more responsibility for assigned work
- Show higher aspirations for the future, including intention to complete high school and college

The Harvard Family Research Project has summarized the research evaluations published in the past ten years for school enrichment programs.

- The more frequent and sustained the programs the greater the gains
- Activities need to have targeted outcomes, be well organized and engaging
- Youth need to develop positive relationships with program staff, who in term model good behavior
- High quality programs effectively leverage partnerships with a variety of stakeholders, especially families, schools and communities.
- Provide exposure to opportunities and possibilities that may not otherwise be available to the students.

We will partner with organizations such as Junior Achievement (JA), University of Louisville, Spalding University, Kentucky State University, Louisville Metro Council District 6, and United Parcel (UPS) (to name a few) to provide meaningful enrichment experiences for the students participating in the program.

As stated in the Keys to Success, nurturing a parent involvement will strengthen our students attendance and participation. To support our students' achievement Dr. Veda McClain, educator, author and Kentucky Department of Education (KDE) consultant, has agreed to engage our parents in pre and post conversations on the importance of supporting their students successful efforts in academic achievement and ways in which they can support their efforts as well as the challenges they encountered along the way.

**Moving Forward thru STEM at California Community Center**  
**A Program for Second and Third Grade Phillis Wheatley Elementary School Students**

**PROGRAM LEADERSHIP and MANAGEMENT**

Program partners include:

- The Louisville Metro Parks and Recreation Department (LMPR)
  - LMPR will be the agency of record, receive the grant monies, and provide the program facilities at the California Community Center. LMPR has made significant investments in the Community Center in the past 12 months and seeks to provide a broad spectrum of programming which will strengthen the capacities of the people of the California Community.
  
- The Wheatley Family Resource Center
  - The Family Resource Center exists to remove nonacademic barriers to learning as a means to enhance student academic success. The Resource Center will be responsible for recruiting participating students, collecting initial academic evaluation data and supporting our parents' involvement.
  
- Clariant
  - Clariant will be the program initiator and primary funder. It will also be represented on the Move Forward Advisory Council and has a seat on the California Community Center Advisory Committee.
  
- Louisville Metro Council District 6, Councilman David James Office
  - Councilman James office will be responsible for facilitating program field trips and program public relations as well as assist in serving as a liaison to the University of Louisville for student leadership team.

The ultimate success of the project will rest with the Executive Management Team which provide program accountability and oversight . Members will represent the program partners and include:

Annie Haigler, Louisville Metro Parks and Recreation Advisory Committee Chair and  
Retired Phillis Wheatley Family Resource Center Director  
Stephanie Hart, Clariant  
Cindy Hooper, Clariant  
Ben Johnson, Assistant Director, Louisville Metro Parks and Recreation  
Lydia Jones, teacher and curriculum specialist  
Grace Smith, retired teacher and curriculum specialist  
Wanda Mitchell Smith, Office Coordinator for Councilman David James  
The Move Forward Thru STEM Curriculum Coordinator  
The Move Forward Thru STEM Program Coordinator

The Advisory Committee Chair will have oversight of this team to ensure goals are met. The Program Curriculum Coordinator responsible for developing specific components of each session, creating student assignments and securing supplies and equipment to ensure each session is fully ready for implementation. There are inherent gains for the college interns such as strengthening their skills in teaching, design, building relationships with their students, and, of course, program development and implementation.

**Moving Forward thru STEM at California Community Center**  
**A Program for Second and Third Grade Phillis Wheatley Elementary School Students**

The Program Coordinator will be responsible for day to day activities and coordinate the activities of the program staff members and serve as a liaison with other community center staff.

Program staff members will be college students who will be selected based on the following criteria:

1. Recommendation of university department supervisor
2. Career interest in education, engineering, science, or social services
3. Two (2) letters of personal recommendations

**PROGRAM STRUCTURE**

These kids have spent all day in school. They want to have FUN, and they need to MOVE! The program must first and foremost meet these criteria to succeed. There will be four (4) sessions arranged in segment of three (3) weeks each session. The STEM events occur on Tuesdays and Thursday and the Enrichment supports occur on Wednesday.

|            |             |  |
|------------|-------------|--|
| Time frame | 4:00 – 5:15 | STEM activities  |
|            | 5:20 – 5:45 | Dinner   |
|            | 5:45 – 6:30 | Physical activities, i.e., basketball, computer lab, game room, etc. |

The Club participants will be 75% second graders and 25% third graders. All the second graders will be performing below grade level in reading and/or math. All the third graders will be designated as novice, the lowest level, in reading and math testing. The Club's first session will begin in February 2017 and go thru the end of the school year in May. Each month will have a different theme. Club curriculum will be designed by University of Louisville education students in collaboration with the Moving Forward Advisory council and elementary school educators. The curriculum will support the school system's core academic content of reading, math and science. Program evaluation will measure both academic and life skills attainment.

Family engage is critical if this program is to succeed. At the end of each session, families will be invited for an evening of "Show and Tell" which will be designed by the students to share their accomplishments.

## Moving Forward thru STEM at California Community Center

### A Program for Second and Third Grade Phillis Wheatley Elementary School Students

The tentative Spring, 2017 schedule for programming is:

| Session/<br>Date          | Academy Challenge<br>Tuesday/Thursday               | Time           | Enrichment<br>Wednesdays   | Staff                                   | Field Trip                                    | FT<br>cost | Community<br>Volunteer          |
|---------------------------|---|----------------|--|---|---|------------|---------------------------------|
| <b>Session I</b>          |   |                |  |   |   |            |                                 |
| Feb 6 – 24,<br>2017       | Robotics (Building a<br>city)<br>(Cost?)            | 4:00 –<br>5:15 | Tennis<br>4:00 – 5:15<br>Dinner<br>Conversation<br>with Meeks and<br>Meeks                                 | U of L<br>Students<br>(preferably<br>3) | JCPS Robotics<br>tournament                   |            | Tola Iyun                       |
| <b>Session II</b>         |   |                |  |   |   |            |                                 |
| Mar. 6 –<br>29,<br>2017   | Computer<br>construction<br>(Cost)                  | 4:00 –<br>5:15 | Computer d<br>Computer<br>design (CAD)<br>Dinner<br>Conversation<br>with Meeks and<br>Meeks                | U of L<br>Students<br>(preferably<br>3) | New tech<br>company in<br>Nulu                |            |                                 |
| <b>Session III</b>        |   |                |  |   |   |            |                                 |
| April 10 –<br>28,<br>2017 | Cooking (chemistry)<br>how to make bread<br>(Cost?) | 4:00 –<br>5:15 | Visual Arts<br>4:00 – 5:15<br>Analise Brown<br>& team<br>Dinner<br>Conversation<br>with Meeks and<br>Meeks | U of L<br>Students<br>(preferably<br>3) | Trip to local<br>restaurant<br><br>Art Sparks |            | SuperChefs<br>JCPS Chef<br>Hans |
| <b>Session IV</b>         |   |                |  |   |   |            |                                 |
| May 8-22                  | Flight simulation<br>(UPS)<br>(Cost?)               | 4:00 –<br>5:15 | Photography.<br>Picture book   | U of L<br>Students<br>(preferably<br>3) | UPS<br>Planetarium<br>Tola Iyun               |            | UPS team<br>Tola Iyun           |

### **PROGRAM EVALUATION**

Program evaluation criteria include:

- *Academic Measurements*
  - 80% of the participating third graders will attain apprentice status.
  - 80% of the second graders will be on grade level in reading and math
- *Life Measurements*
  - Steady Attendance
    - This is a family responsibility. You can't learn if you aren't present. Poor attendance is the number one obstacle for kids living in California neighborhood achieving success. An overall daily attendance rate of 85% and an 80% program retention rate are the goals.
  - Learn to Love Learning

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- In general the kids selected for this program have not developed a love of learning. For example, one of the second graders who is a strong candidate for

the program is currently performing math at a 3<sup>rd</sup> grade level, but he will tell you he doesn't like math. Each kid who participates will be able to identify one school subject which they enjoy and explain why they like it.

- Begin to See Opportunities
  - Each kid who participates will be able to link the activities in which they engage to possibilities for their future by defining two possible STEM careers that meet their interests one which requires a college education and one which does not.

Program evaluation is the responsibility of the Curriculum Coordinator. The Wheatley Family Resource Center will be responsible for assisting in the collection of data. Clariant representatives serving on the Executive Management Team will provide guidance.

**PROGRAMING IN YEARS TWO AND THREE**

Once a student is enrolled in the program the goal is that they will continue to participate throughout their elementary school career. Two sessions will be held each year, one in the fall and one in the spring. The fall program will be open to the students who participated in the previous spring session. The spring session will include two classes: the experienced participants and a new group of second and third graders. Curriculum will be developed so no student receives the same program twice.

| SCHOOL YEAR | FALL  | SPRING  |
|-------------|---|---|
| 2016-17     | No Program                                    | Group A 25 students                           |
| 2017-18     | Group A 20 students<br>Group B 25 students    | Group A 16 students<br>Group B 20 students    |
| 2018-19     | Groups A/B 28 students<br>Group C 25 students | Groups A/B 22 students<br>Group C 20 students |

Assumes an 80% student retention rate.



**Moving Forward thru STEM at California Community Center  
A Program for Second and Third Grade Phillis Wheatley Elementary School Students**

**PROJECTED PROGRAM BUDGET**

|                            | <b>2017<br/>Feb. – Dec.</b> | <b>2018<br/>Jan. – Dec.</b> | <b>2019<br/>Jan. – Dec.</b>        |
|----------------------------|-----------------------------|-----------------------------|------------------------------------|
| <b>Revenue:</b>            |                             |                             |                                    |
| Clariant Grant             | 25,000                      | 25,000                      | 25,000                             |
| Community Grants           |                             | 10,000                      | <del>15,000</del> 10,000 <i>AS</i> |
| Sponsorships/Donations     |                             | 5,000                       | 5,000                              |
| <b>Total Revenue</b>       | <b>25,000</b>               | <b>40,000</b>               | <b>40,000</b>                      |
| <b>Expenses:</b>           |                             |                             |                                    |
| <b>Personnel</b>           |                             |                             |                                    |
| • Program Director         | Donated                     | 2500                        | 2500                               |
| • Program Coordinator      | 3600                        | 7200                        | 7200                               |
| • College Interns          | 5400                        | 10800                       | 10800                              |
| Session Materials          | 8000                        | 4000                        | 4000                               |
| Work Supplies              | 250                         | 500                         | 500                                |
| Program Logo Wear          | 750                         | 1500                        | 1500                               |
| Field Trips                | 1200                        | 2400                        | 2400                               |
| Family Nights              | 2500                        | 5000                        | 5000                               |
| Transportation             | 2800                        | 5600                        | 5600                               |
| Promotion Materials/Prizes | 500                         | 500                         | 500                                |
| <b>Total Expenses</b>      | <b>25,000</b>               | <b>40,000</b>               | <b>40,000</b>                      |

**Budget Assumptions**

Revenue

- Clariant Grant
  - Monies used for program operation and administration
- Community Grants
  - Grants from other community organizations
- Sponsorships
  - For specific events like a field trip

**Expense (2017)**

- Personnel
  - Program Curriculum Coordinator
    - The Program Curriculum Coordinator is donating her time in year one. A small stipend is projected for years 2 and 3..

## **Moving Forward thru STEM at California Community Center**

### **A Program for Second and Third Grade Phillis Wheatley Elementary School Students**

- Program Coordinator
  - @ \$400/Mo for 9 months (Jan., Feb., Mar., Apr., May, Sept., Oct., Nov., Dec.)
  
- College Interns
  - (4 hrs/week/person x \$15.00/hr. = \$60.00/wk. X 3 wks = 180.00/3 week session. 180.00 X 3 persons = \$540.00.00 per session. Assuming four (4) sessions, the estimated total stipend cost of student interns is \$5400.00 over the nine (9) month period).
- Session Materials
  - At \$8000 in start up supplies and \$2,000 per session for items like legos, software, etc.
- Work Supplies
  - General supplies like paper, crayons, etc.
- Logo Wear
  - @ \$30/participant. A significant amount is invested in logo wear to make this an elite program. For this population, name brand logo wear is very, very important.
- Field Trips
  - Budgeted at \$300 per trip.
- Family Nights
  - Five Family nights at @ \$250/night for food
- Transportation
  - @ \$700 per field trip
- Promotional Items, League and Tournament Prizes
  - @ \$20/participant assumes donations in years 2 and 3.

\*Note: Expenses may be more or less that projected. Community volunteers will be recruited to assist in managing budgetary funds and program growth and development.

