## Lexington Education Foundation 2015-16 Grant Awards

LEF awards grants in three categories:

- *Fellowships* enable individual educators to pursue professional learning opportunities to deepen their subject-area knowledge and strengthen their teaching skills. Fellowships recipients attend workshops, institutes, conferences and guided field experiences that relate directly to their positions.
- *Program Grants* support the exploration and introduction of innovative teaching techniques, enriched educational materials, and new uses of technology in the classroom.
- *School Community Grants* enable each of the nine Lexington public schools to undertake activities that will strengthen the overall learning environment and build community school-wide.

## **Bowman Elementary School**

### <u>Fellowship</u>

**Kim Rogerson**, School Psychologist at Harrington and Bowman, will attend the National Association of School Psychologists' annual convention in New Orleans, LA. The conference will present evidence-based research, strategies and techniques for testing, intervention and support that address such issues as how to meet students' increasingly complex needs and differentiate instruction.

### Program Grants

**Elementary Robotics Curriculum Integration.** Building on the successful LEFfunded pilot of an afterschool robotics and engineering program at Estabrook and Bridge Schools, LHS teachers and the LexRobotics team will extend the program to all Lexington elementary schools and train teachers to integrate robotics and engineering classes into the schools' regular curriculum, as well.

**Engaging Students in STEM Using the Flying Classroom Curriculum.** Fourth grade students will vicariously circle the globe on a "Flying Classroom" expedition that explores STEM, geography, cultural studies and history in locales around the world via a web-based "reality show" that engages students in hands-on discovery and inquiry and interactive simulations.

### School Community Grant

# Cultural Proficiency, Mathematics, Reading, and 5<sup>th</sup> Grade Leadership

**Development.** Bowman will advance ongoing initiatives in cultural proficiency, mathematics professional learning, units of study using the Readers Workshop approach, and the development of a 5<sup>th</sup> grade leadership development seminar.

### **Bridge Elementary School**

### **Fellowships**

**Kristen Gray**, a kindergarten literacy teacher, and **Allison Gullingsrud**, a 1<sup>st</sup> grade teacher, will attend the Columbia Teachers College Summer Reading Institute. They will learn how to use the Readers Workshop model, tailored to each grade level, to create a learning community in which students develop skill in and love of reading as they share ideas and learn both from the teacher and from one another.

**Deborah Side**, a music teacher, will attend a masters workshop in Ghana that combines an international methodology of teaching music with a focus on building students' understanding of African music and culture through games, songs, dances, and instrumental pieces.

### School Community Grant

**Outdoor Classroom**. Bridge will design and build an outdoor classroom that gives students, teachers, and the community a structured yet open space to extend curriculum and learning opportunities.

### Estabrook Elementary School

### **Fellowships**

**Karen McCarthy**, LPS' K-5 Science Coordinator, Estabrook 2<sup>nd</sup> grade teachers **Amy Royal** (a member of the Social Studies Curriculum Review Committee) and **Lori Verity** (a member of the Lexington Science Steering Committee), and Jane Hundley, LPS' K-5 Social Studies Coordinator (whose participation is funded by LPS) will participate in an Earthwatch expedition in the Indian Himalayas, conducting research on how environmental change affects butterflies and bees. The program will give the teachers experience in the practice of scientific inquiry and strengthen their teaching of the Insect Investigations unit and the social studies unit on India.

**Erin Affronti, Laurie Barnhart** and **Elizabeth Thompson**, special education teachers, will attend the Association for Supervision and Curriculum Development's annual conference in Atlanta, GA. They will learn from national experts how to apply the principles of growth mindset – a belief that one can learn more and become

smarter through hard work and perseverance – to strengthen struggling students' motivation, self-confidence, resilience, and achievement.

### School Community Grant

**Environmental Learning through Composting.** Estabrook will find outlets for the compost created in the school cafeteria, using this initiative as a means of educating students about being responsible stewards of the earth and living into Estabrook's LEED Silver Certification.

## Fiske Elementary School

### <u>Fellowships</u>

**Nick Hart** and **Susan London**, music teachers, will attend a workshop that shares Bobby McFerrin's approach to teaching vocal improvisation through "circle songs" in K-5 music classes and choruses.

### Program Grants

**Elementary Robotics Curriculum Integration.** Building on the successful LEFfunded pilot of an afterschool robotics and engineering program at Estabrook and Bridge Schools, LHS teachers and the LexRobotics team will extend the program to all Lexington elementary schools and train teachers to integrate robotics and engineering classes into the schools' regular curriculum, as well.

**Peer Leadership and Newcomer Family Project** extends and expands an LEFfunded pilot program to support students and families who are new to Fiske and possess very limited English-language ability. Each student will be matched with both a teacher mentor and a peer leader mentor. The program will include community meetings and outreach to newcomer parents, as well. Approaches, materials, and results will be shared to facilitate the development of similar programs at schools across the district.

## School Community Grant

**Book Collection.** Fiske will augment the school's book collection, purchasing a wide variety of texts across genres and reading levels to engage students as readers and support lifelong literacy skills.

## Harrington Elementary School

## <u>Fellowship</u>

**Kim Rogerson**, School Psychologist at Harrington and Bowman, will attend the National Association of School Psychologists' annual convention in New Orleans, LA. The conference will present evidence-based research, strategies and techniques for

testing, intervention and support that address such issues as how to meet students' increasingly complex needs and differentiate instruction.

## Program Grants

**Elementary Robotics Curriculum Integration.** Building on the successful LEFfunded pilot of an afterschool robotics and engineering program at Estabrook and Bridge Schools, LHS teachers and the LexRobotics team will extend the program to all Lexington elementary schools and train teachers to integrate robotics and engineering classes into the schools' regular curriculum, as well.

**Empowering 21<sup>st</sup> Century Musicians: Teaching Musical Composition with Interactive Whiteboard Technology.** The acquisition of an interactive projector will enable a music teacher to transform the whiteboard in the school's music room into an interactive whiteboard, making it possible for students to engage in creative musical composition.

## School Community Grant

**A Playground for Everyone**. Harrington will design a school playground that meets the needs of a diverse student population – both those who use recess for vigorous physical activities and those who seek quieter, less chaotic spaces.

## Hastings Elementary School

## <u>Fellowship</u>

**Anne Knight**, Assistant Principal, will attend a Columbia Teachers College Coaching Institute to learn methods of staff development implemented by the Teachers College Reading and Writing Program.

### Program Grant

**Elementary Robotics Curriculum Integration.** Building on the successful LEFfunded pilot of an afterschool robotics and engineering program at Estabrook and Bridge Schools, LHS teachers and the LexRobotics team will extend the program to all Lexington elementary schools and train teachers to integrate robotics and engineering classes into the schools' regular curriculum, as well.

### School Community Grant

**"We are Hastings" Project.** In celebration of Hastings' 60<sup>th</sup> birthday and of the diversity of family cultures and traditions represented at Hastings, the school will create a permanent record in photos and text of the school community as it exists today and as it existed in its earlier years.

## Clarke Middle School

### **Fellowships**

**Jamie Welsh**, a Clarke 7<sup>th</sup> grade science teacher, **James Werner**, a Clarke 6<sup>th</sup> grade science teacher, and **Kevin Buckley**, a Diamond 8<sup>th</sup> grade science teacher, (along with Diamond's Science Department head Valerie Franks, whose participation is funded by LPS), will attend the National Science Teacher Association's annual conference in Nashville, TN, where they will learn how to use the Next Generation Science Standards (NGSS) to build students' scientific literacy. The team will be responsible for determining the scope and sequence of the new middle school science curriculum based on NGSS and MA standards.

**Jillian Aldrich** and **Amy Timmins,** Clarke 6<sup>th</sup> grade English teachers, will attend the Columbia Teachers College Summer Reading Institute. They will learn how to use the Readers Workshop model in the 6<sup>th</sup> grade English/Language Arts class to create a learning community in which students develop skill in and love of reading as they share ideas and learn both from the teacher and from one another.

## Program Grant

**Using LEGO Mindstorms to Teach Middle School Robotics.** Based on learnings from an LEF-funded robotics project at Diamond, Clarke science teachers will develop and teach a robotics course during Clarke's WIN enrichment blocks. Students will explore science, technology, engineering, and math topics through the use of LEGO Mindstorms EV3 kits that contain software and hardware to create customizable, programmable robots from LEGO parts.

### School Community Grant

**WIN Block Online Scheduling.** Clarke will implement an online program to schedule students into WIN block assignments in the school's pilot intervention/enrichment program.

## Diamond Middle School

## **Fellowships**

**Kevin Buckley**, a Diamond 8<sup>th</sup> grade science teacher, **Jamie Welsh**, a Clarke 7<sup>th</sup> grade science teacher, and **James Werner**, a Clarke 6<sup>th</sup> grade science teacher (along with Diamond's Science Department head Valerie Franks, whose participation is funded by LPS), will attend the National Science Teacher Association's annual conference in Nashville, TN, where they will learn how to use the Next Generation Science Standards (NGSS) to build students' scientific literacy. The team will be responsible for determining the scope and sequence of the new middle school science curriculum based on NGSS and MA standards.

**Cecilia Vosland,** a reading intervention specialist, will attend the National Council of Teachers of English Convention in Minneapolis. What she learns there about the latest approaches to English/Language Arts curricula, skill-development strategies, national literacy trends, and instructional materials will inform her work with struggling readers and her collaboration with classroom teachers to strengthen students' reading comprehension and critical thinking skills.

## School Community Grant

**6th Grade Community Building and TIE/ICE Block Online Scheduling.** Diamond will bring ImprovBoston to campus to engage the entire 6<sup>th</sup> grade class in building community and exploring the school's values, and will implement an online program to schedule students into ICE/TIE block assignments in the school's pilot intervention/enrichment program.

## Lexington High School

## <u>Fellowships</u>

**Francesa Pfrommer**, an LHS math teacher, will attend the St. Paul School and University of Pennsylvania's Conference on Teaching and Learning, which will present findings on recent brain research about how adolescents learn and offer guidance on how to foster and assess student-centered learning in the classroom.

**Christen Walters**, an LHS English teacher, will attend the Globe Theatre's "Shakespeare Plays When Shakespeare Works" international teachers' conference in London, where she will participate in master classes on new teaching strategies and resources for bringing the study of Shakespeare to life.

**Heidimarie Floerke**, an LHS German teacher, will travel to Berlin to attend the Goethe Institute course, "Film City Berlin," which will present innovative techniques for teaching German as a second language and German culture. Using authentic sources (produced by native speakers for native speakers) such as film engages students who present diverse learning styles, and is a key component of the World Language Department's plan for aligning the language curriculum with the National Standards for Language Learning.

### **Program Grants**

**Multidisciplinary, Informal Design and Prototyping Learning Facility.** Based on the popularity of last year's LEF-funded pilot of an extracurricular R&D engineering space, LHS will acquire additional equipment and materials to establish an expanded, permanent learning space for faculty and students not only in engineering but also in subjects as diverse as music and business. Students will learn at their own pace under the guidance of student and adult mentors. **Understanding the Science of Physics – Creating Resources for AP Physics I.** Physics teachers will create textbook and workbook resources aligned with new AP Physics I guidelines that focus on building students' conceptual understanding of the physical world through inquiry-based instruction and assessment.

**Student Broadcast Station and Digital Control Room.** This project will transform an old, nonfunctional control room at the high school into a true broadcast production learning space and studio. With state-of-the-art HD digital camcorders, nonlinear editing systems, audio and video mixers, and programmable broadcasting equipment, students will have the opportunity to learn broadcast production techniques and create broadcasts for both the LHS and larger Lexington community.

**Literature and Composition I iBook for Freshman English.** A teacher will bring her entire freshman English curriculum onto an interactive iPad resource that pilots this use of technology to strengthen student learning. The resource will include readings, worksheets and website links and enable students to annotate and highlight material and create digital study flashcards.

**Elementary Robotics Curriculum Integration.** Building on the successful LEFfunded pilot of an afterschool robotics and engineering program at Estabrook and Bridge Schools, LHS teachers and the LexRobotics team will extend the program to all Lexington elementary schools and train teachers to integrate robotics and engineering classes into the schools' regular curriculum, as well.

## School Community Grant

**Strengthening Student Publishing and Developing Resiliency in Changing Times.** LHS will take the sophomore class poetry publication program to the next level by publishing an online literary magazine. In addition, building on last year's LEF School Community Grant, LHS will offer an experiential Challenge Day program that builds connections among students and teaches empathy, emotional control, self-confidence, and prosocial competence.

# Lexington Public Schools Central Office

# <u>Program Grant</u>

**Summer Professional Development Workshops.** The LPS Central Office will create a district-wide schedule of professional learning summer workshops on diverse topics that address the district's goals, meet teachers' educational and instructional needs, and promote student success. Probable topics include differentiated instruction; the development of integrated units of study that reflect newly revised standards in social science, English, and STEM; meeting the needs of English language learners; and intervention models.