

Science Education Fellowship

Program Overview

Thank you for your interest in the Science Education Fellowship! We have decided to reopen the application time period in order to give more applicants the chance to apply for this Fellowship; we hope that you will consider applying to this new Boston opportunity in order to grow professionally as a classroom teacher and as an instructional leader during your term as a Science Education Fellow.

Included in this packet is a description of the Science Education Fellowship (SEF) program, eligibility requirements, and application materials. **All application materials must be received via email, mail, or fax no later than 11:59 PM on April 23, 2009.** All Fellowship recipients will be notified by May 13, 2009. There will be a Kickoff Celebration on May 20 from 4:30-6 at the University of Massachusetts Boston for all Fellows; please make arrangements to be available at that time now in anticipation of your Fellowship acceptance.

The SEF program is designed to foster teacher-leadership skills in those who are committed to staying in a Boston Public Schools classroom for the next two years. For clarity, SEF is defining *teacher-leadership* as the ability and knowhow of a high quality classroom teacher to help other teachers develop improved instructional skills. Applicants do not need to have prior leadership experience nor do they have to have participated in other Boston Science Partnership events before. While many teachers may find these skills to be helpful for other avenues of leadership in the district, this program is not designed to facilitate the transition of a classroom teacher to becoming a school-based or district-based leader, such as a principal or superintendent. 23 teachers from grades K-12 in the areas of biology, chemistry, physics, and earth/environmental science will be selected to be a Fellow for the September 1, 2009-August 31, 2010 term. A second cohort will be selected for the 2010-2011 term.

SEF: A New Boston Science Partnership Initiative

The Science Education Fellowship is a master-teacher program sponsored by the National Science Foundation in connection with the Boston Science Partnership (www.boston-science.org). The Fellowship is a year-long program for experienced teachers that uses a model of teacher support and development to increase the capacity of teacher-leadership in the Boston Public Schools. This model includes a comprehensive set of activities designed to improve teachers' pedagogical knowledge, content knowledge, and pedagogical content knowledge, focusing on the outcome of increased achievement in science for underperforming students.

The goals of the program are:

- To create and support a corps of urban teacher leaders
- To institute a culture of active and reflective instruction
- To improve teacher quality through vertical alignment within content and horizontal alignment within grade bands, meeting in small groups, and professional development in order to increase student achievement

These goals will be met by focusing the professional development in three specific areas:

Thinking about Teaching: Teachers will be involved in structured inquiry into their own teaching and growth using tools developed through educational research. As a cohort they will meet regularly to discuss core topics of teaching and learning using current videotapes of their teaching. Fellows will be asked to tape specific concept areas in order to see one another teaching similar concepts across grade levels. Monthly meetings will be focused on analysis of those videos and other artifacts from the classroom.

Leadership to Peers: Fellows will be asked to identify opportunities for themselves to take a leadership role within the district or with their peers. To facilitate this, Fellows will work with experts in adult learning and leadership in order to develop the skills that will allow them to help other teachers to become leaders, to be able to motivate other teachers, and to bring other teachers along the professional continuum.

Individual Growth Opportunities Each teacher has areas of their professional lives that they hope to grow to meet a need they see in themselves or their students. Each Fellow will identify and pursue opportunities for growth based on their own professional growth plans. These might include submission of materials for National Board Certification, developing their own professional development program, or taking a graduate level content course.

Fellowship Program Description

The core unit of teachers in the program is the Learning Team. Learning Teams will consist of teachers who teach the same content area in the same grade band. For example, one Learning Team could consist of elementary life science teachers and another Learning Team could consist of high school chemistry teachers. Elementary and middle school teachers should select the content area they would like to focus on or in which they have the most experience in.

Fellows will meet regularly in their Learning Teams, as well as with teams in their content area, with teams in the grade level, and as a whole group. Consultants and professional development leaders will facilitate rich discussions and reflections on how to improve instruction in their classroom and leadership with peers. This work will happen in two ways: (1) core requirements and (2) electives.

Fellowship Program Requirements	
<p style="text-align: center;"><u>Core Elements</u></p> <ul style="list-style-type: none">• Learning Team participation• Videotape and edit 3 lessons• Lead and Videotape one PD that you lead• Create and maintain website• Develop an individualized professional growth plan	<p style="text-align: center;"><u>Electives for Professional Growth Plan</u></p> <ul style="list-style-type: none">• Present at a national conference• Apply for national board certification• Develop your own professional development program for other teachers• Take a graduate-level science course• Work with a university professor

The SEF has a core set of work that all Fellows must participate in. This will include videotaping and editing at least 3 lessons per year, participating in Learning Teams meetings (approximately once per month), leading and videotaping a professional development workshop, setting up and maintaining a website, working with your headmaster/principal to determine how to be a leader while still being in the classroom, and developing an individualized professional growth plan.

A Fellow's individualized growth plan should consist of at least 2 SEF electives. Fellows will work with a consultant who will help them to develop their own professional growth plan. The plan should focus on ways to improve their own instruction and leadership skills. Accordingly, this work should tie in to what type of professional development the Fellow would like to either develop or lead for other BPS teachers. Examples of professional growth plan electives are national certification, presenting at a national conference, working with a university professor, taking a graduate-level science class, or any other activity that can demonstrate growth as a teacher or as a leader. The total amount of hours of this individually tailored professional development should equal about 100 hours during the Fellowship.

Timeline

April 23, 2009	Applications are due
May 13, 2009	Fellows are notified
May 20, 2009	SEF Kickoff Celebration
May 2009-June 2009	Videotape 1 lesson*
Sept 2009-Aug 2010	Cohort 1 Fellowship Term

Eligibility

All science teachers in grades K-12 who have taught science for at least three years and been employed by the Boston Public Schools for at least 2 years are invited to apply; teachers must hold a valid license to teach a science subject. Teachers should be able to describe past professional leadership experiences and must be able to demonstrate how they have been successful in the classroom. Teachers also must have the support of their headmaster or principal to apply due to the extra commitments you will have during the school year. Furthermore, teachers who become Fellows are committing to remain in a BPS classroom for at least one year after the Fellowship ends. Please note that SEF is an intensive program, and applicants should consider their other teaching and professional obligations before applying.

How to Apply

We are excited to offer this National Science Foundation opportunity to all BPS science teachers and encourage anyone who would like to engage in this type of professional development to apply. To apply, complete the BSP Science Education Fellowship Applicant Information Form, Open Response Questions, and submit all supplemental documents. **All materials must be received by 11:59 PM on April 23, 2009.** Please submit completed applications via email to allison.scheff@umb.edu, via mail to COSMIC, UMass Boston, 100 Morrissey Blvd, W-4-181, Boston, MA 02125, or via fax to 617.287.5956.

Note: Pending IRB approval

Compensation

Fellows who successfully complete their Fellowship term will receive a \$10,000 stipend. This will be paid upon completion of the Fellowship.

Contact Information

For more information, please contact Allison Scheff, Associate Project Director for the Boston Science Partnership, via phone at 617.287.5632 or via email at allison.scheff@umb.edu.