Billion Oyster Project STEM Collaboratory – A Teacher Fellowship at Pace University

FELLOWSHIP CONTRACT

The Billion Oyster Project Fellowship is a two-year professional development program that trains teachers to engage their students in hands-on environmental science and restoration ecology in and around New York Harbor. This is a unique opportunity for teachers to work together with leading marine scientists and STEM professionals to transfer scientific knowledge directly to students historically underrepresented in STEM fields. BOP is a content-rich, place-based, experiential curriculum around the project of keystone species restoration. The project and the curriculum engages our city’s young people in the study and practice of ecological restoration and environmental stewardship. Through monthly colloquium style classes, hands-on trainings, and annual symposia, scientists share content knowledge with teachers and teachers share pedagogy and curriculum expertise with scientists. BOP teacher-fellows are provided technical, material, and financial support with which to implement BOP curriculum in their classrooms and in the field. To support participation in all five pillars of the project, teachers are given an annual stipend of $3,000 and schools receive up to $4,000 per year for related expenses including additional monitoring supplies, books, transportation, substitute coverage, or advanced underwater equipment such as the OpenROV.

Below is an outline of the responsibilities for Teachers, School Administrators, and BOP staff. Carefully read the text below then sign the contract on the last page.

Provided by BOP, Pace, and New York Harbor Foundation:

- $3,000 annual stipend for each participating teachers
- $4,000 annual subsidy for each school with two participating teachers ($2,000 per teacher)
- One graduate credit in science education for each participating teacher
- Support and one-on-one consultation from BOP curriculum specialist
- In-school visits from BOP coordinator for recruitment and outreach (one per semester)
- Waterfront Site; permits, access, and coordination with property owner
- Restoration Station, including: live oysters, supplies and hardware, water quality sensor and water quality test kits, class set of tablet computers, BOP field science manual (student and teacher versions), additional supplies and equipment as needed
- Full access to online curriculum archive and editing rights
- Bylines for participating teachers in curriculum publications and journals
- Full access to online data collection tools, dashboards, and datasets
- Certificate of Participation and Promotional Posters for school and classrooms
- Access to project evaluation and research results
Responsibility of Teachers:

- Complete all core activities:
  - Attend monthly fellowship meetings at Pace University
  - Attend Field Training Days on Governors Island
  - Curriculum development/one lesson per month
  - Micro-teaching presentation/one lesson per year
  - Annual BOP STEM Symposium with students
  - Restoration Station Monitoring trips
  - BOP Curriculum

<table>
<thead>
<tr>
<th>Core Activity</th>
<th>Estimated Time Commitment (over 2 years)</th>
<th>Years/Semesters</th>
<th>Flexibility</th>
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</thead>
<tbody>
<tr>
<td>Attend monthly fellowship meetings at Pace University</td>
<td>30 hours (plus travel)</td>
<td>Years One: 9 meetings Year Two: 1 meeting</td>
<td>One excused absence in year one</td>
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<tr>
<td>Attend Field Training Days on Governors Island</td>
<td>3 days</td>
<td>Years One and Two</td>
<td>Optional for year Two</td>
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<tr>
<td>Curriculum development/one lesson per month</td>
<td>40-60 hours</td>
<td>Years One and Two, Spring and Fall</td>
<td>None</td>
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<tr>
<td>Micro-teaching presentation/one lesson per year</td>
<td>5-10 hours</td>
<td>One in year Two, either Spring or Fall</td>
<td>Scheduled on an individual basis</td>
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<tr>
<td>Annual BOP STEM Symposium with students</td>
<td>One day + prep</td>
<td>Years One and Two, Spring Semester</td>
<td>Year one students are optional, year two students required</td>
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<tr>
<td>Restoration Station Monitoring trips</td>
<td>Min. 6 field trips</td>
<td>Two in Year One and Four in Year Two</td>
<td>None</td>
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<tr>
<td>BOP Curriculum</td>
<td>Integrated</td>
<td>Fall Semester Year One, Spring and Fall Year Two</td>
<td>Can be used throughout the year</td>
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- Teach students BOP field science protocols
- Take four restoration station monitoring trips per year with select groups of students
- Teach students the BOP Input app and Field Science Dashboard
- Implement BOP core curriculum in your classroom
- Develop and upload new BOP curriculum using the online “curriculum portal”
- Engage other teachers and school community in BOP themes and resources
- Take one field trip per year to The River Project or other partner institutions (optional)
- Communicate with afterschool programs in your building to coordinate in-school to after-school links and shared BOP activities
- Allow the project evaluation team to observe your classes twice per year and conduct other evaluation/research activities including pre/post assessments and surveys
- Participate in evaluation and research activities for teachers

Responsibility of Principal/School Administration:

- Provide logistical and administrative support to participating teachers;
  - Arrange for substitute coverage and chaperones for field class
  - Help arrange for transportation to waterfront field sites
  - Communicate with parents of participating students and help obtain permission for field class as needed
• Work with New York Harbor Foundation to receive and account for school-based subsidy
  o Provide an itemized list of all project related expenses up to and over the amount of
    the subsidy (to help NYHF understand the total costs of participation)
• Provide project evaluation team with access to classrooms and other learning
  environments for observations, evaluations, and research activities
• Provide project evaluation team with access to student and school level data (e.g. grades,
  test scores, attendance) as approved by NYC DoE Institutional Review Board
• When possible, identify comparison groups of teachers and students who complete the
  project evaluation tools but do not participate in the project directly; enable project
  evaluation team to conduct evaluation activities with control groups

Signatures

I certify that I have read and agree to all of the conditions stated above. I confirm that I am aware of
the expectations that are held for BOP Schools and participating teachers in the BOP STEM
Collaboratory Fellowship and commit to fulfilling those responsibilities.

<table>
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<tr>
<th>Applicant's Name (print)</th>
<th>Signature</th>
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