

**Focus on Mathematics  
Postdoctoral Research Associate**

**Institution/Company:** Boston University / Education Development Center, Inc.

**Departments:** Department of Mathematics and Statistics (BU) / Division of Mathematics Learning and Teaching (EDC)

**Employer Types:** Academic / Research

**Position Type:** Postdoctoral Research Associate (Joint Position)

**Subject Areas:** Mathematics and Education

**Geographic Location:** Boston, MA and Newton, MA

**Start Date:** September 1, 2007

**Duration:** 1 year, renewable

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**Summary:** The Department of Mathematics and Statistics at Boston University and the Division of Mathematics Learning and Teaching at EDC are pleased to create a unique opportunity for a postdoctoral professional. We invite candidates with doctoral degrees in mathematics and strong interest in mathematics education to join us in building a new research program. Our focus is on creating opportunities for learners (K-12 students *and* teachers) to understand mathematics and mathematical thinking in deep and enduring ways by seriously attending to what it means to *do* mathematics. As part of this work, we are contributing to new definitions of what it means to acquire *mathematics knowledge*.

This research agenda is part of a partnership funded by the National Science Foundation called *Focus on Mathematics*. The Partnership engages over fifteen mathematicians in a spectrum of activities ranging from study groups, summer programs, a new Masters Degree, student math fairs, curriculum review, seminars, and colloquia (<http://www.focusonmath.org>). This is lively, engaging, and satisfying work for mathematicians. Our work is based on some core principles:

1. Students learn more mathematics, and more important mathematics, when their teachers know more mathematics, understand it at deeper levels, and are continually engaged in learning more mathematics. All teachers benefit from this approach, and so too do all students.
2. While teachers' time in the classroom is clearly a most critical part of their profession, so too is how they spend their time out of the classroom. Ongoing professional growth is critical for all teachers.
3. Students and teachers can like doing hard mathematics. This is not a belief about only "special" students or "special" teachers; it is true for almost anybody under the right circumstances.
4. Personal experience of doing mathematics, challenging mathematics, is a necessary prerequisite for understanding the nature of mathematics as well as how students learn mathematics for themselves.

**Requirements:** Candidates must have earned a doctorate in mathematics and exhibit strong interest in research in mathematics education. Prior experience working with mathematics teachers is highly desirable.

**Responsibilities include:** Engage in Focus on Mathematics activities – work with PIs to organize a research seminar devoted to knowledge of mathematics for teaching; mentoring teachers in mathematical immersion (PROMYS for Teachers); participate in FoM activities. Participation in graduate seminars in Boston University's Department of Mathematics and Statistics is a plus.

**Application procedure:** Submit to [mathjobs.org](http://mathjobs.org): cover letter, three letters of recommendation, complete curriculum vitae, and essays addressing the following questions:

- a. Why does this position interest you?
- b. What research experiences in mathematics and education and/or on teaching and learning do you have? (References will also address this question. Thesis work in pure mathematics is relevant.)
- c. What are your mathematical strengths and interests?
- d. What are your long-term career goals?

We recognize that this is an unusual position and we seek unusual candidates. If this position interests you, and you feel you can contribute strongly to the goals of this listing, we encourage you to apply.

**Boston University and Education Development Center are Affirmative Action / Equal Opportunity Employers**