



# THE BEACON

## SCHOOL OF EDUCATION

University of Massachusetts Amherst

Access The Beacon online: <http://www.umass.edu/education/publications/beacon.shtml>.  
Or go to the School of Education home page and click on The Beacon icon.

### SEEKING NOMINATIONS FOR THE SCHOOL OF EDUCATION COLLEGE/SCHOOL OUTSTANDING TEACHER AWARD

The College Outstanding Teacher Award program was instituted as a complement to the Distinguished Teaching Awards given by the Graduate School. The purpose of the award is to honor individual faculty members for their teaching and mentoring accomplishments within their own colleges.

While classroom teaching is the fundamental criterion, this award also actively values supervision of field/clinical experiences, supervision of research, and mentoring professional publications and presentations.

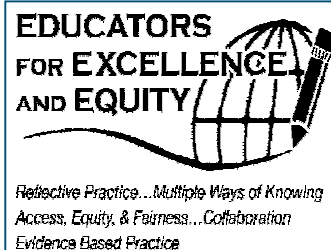
The Office of Academic Affairs is **seeking nominations by colleagues and/or students**.

Please submit your nomination to Jane Clukay ([jclukay@educ.umass.edu](mailto:jclukay@educ.umass.edu)) in the form of a letter highlighting why your nominee should be considered for this award.  
**Deadline for receiving nominations is Friday, February 10, 2012.**

**See 2012-13 scholarship listings on page 4.**

#### The Beacon Deadline is FRIDAY

- Please submit general news and announcements to: [dms@educ.umass.edu](mailto:dms@educ.umass.edu) by 5:00 P.M. on Friday for inclusion in the following issue. All assistantship notices will run for two issues.
- Please submit notices of examinations and formation of dissertation committees to Linda Guthrie. These types of announcements will run for one week.



School of Education ✧ 813 N. Pleasant Street, Amherst MA 01003

## Teaching Assistantship

### Department of Teacher Education and Curriculum Studies

Ten hours/ week position is available for Spring 2012 to teach Education 491a, Introduction to Inclusion. The course and reading have been pre-planned but there is opportunity to fine tune the educational experiences.

**Responsibilities include:** course preparation, planning and delivering of all class sessions, selecting student assignments, evaluations of student work and submitting final grades.

**Qualifications include:** Excellent communication and organization skills, experience in dealing with students with special needs, previous experience as a teaching assistant in this or a related course, and a professional attitude and attention to academic requirements.

Please apply with a updated resume to Grace Craig, Acting Chair, TECS, at [gccraig@educ.umass.edu](mailto:gccraig@educ.umass.edu)

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## ATTENTION: FINAL ORAL EXAMINATION NOTICE FOR DOCTORAL STUDENTS

Doctoral students who plan on graduating in May need to submit their Doctoral form D-8 to Linda Guthrie to schedule their final oral defense 4 weeks in advance of the defense date. The doctoral forms are available at:

[http://www.umass.edu/education/academics/doctoral\\_guidelines.shtml](http://www.umass.edu/education/academics/doctoral_guidelines.shtml)

Students should schedule their defense no later than March 30th to have time to make any necessary edits. The deadline for doctoral students to complete the final oral defense and file all paperwork with Linda Guthrie for a May graduation is April 6.

## Spencer Foundation- Education Research Grants Deadline: February 10, 2012

The Spencer Foundation provides grants to investigate ways in which education, broadly conceived, can be improved around the world. From the first, the Foundation has been dedicated to the belief that research is necessary to the improvement in education. The Research Grants program accepts applications that fit within one or more of four areas of inquiry: the relation between education and social opportunity; organizational learning in schools, school systems, and higher education institutions; teaching, learning, and instructional resources; and purposes and values of education. In addition to proposals in these defined areas, the Foundation will continue to provide an opportunity to submit field-initiated proposals outside these areas. Small research grants are made up to \$40,000. Larger research grant proposals are accepted year-round. For more information: <http://www.spencer.org/content.cfm/how-to-apply>

## ANNOUNCEMENT OF FINAL ORAL EXAMINATION

**MARTHA MAGRETA** February 28, 2012, 2:30 p.m. Room 287, Hills South. "Mitigating Negative Externalities Affecting Access and Equity of Education in Low-Resource Countries: A Study Exploring Social Marketing as a Potential Strategy for Planning School Food Programs in Malawi."

**Chairperson: Dr. Gretchen B. Rossman.**

### Faculty, students, staff & alumni share what they are doing

**Jasmine Robinson**, a third grade teacher at the Crocker Farm Elementary School, Amherst, and a doctoral student in the Language, Literacy, and Culture concentration, was recognized with 2012 Norma Jean Andersen Award for Civil Rights and Academic Achievement at the Martin Luther King Jr. Community Breakfast at the Amherst Regional Middle School. The Race and Discipline Action Rights (RaDAR) Committee of Amherst awards current teachers, administrators or staff members in the Amherst Pelham Regional school district who are nominated for their work with children across the grades that "promotes the ideals of a just and respectful community built on compassionate relationships." Norma Jean Anderson was professor emeritus of the School of Education and a strong advocate for educational access and diversity.

**Please send items of interest to [dms@educ.umass.edu](mailto:dms@educ.umass.edu)**

## ABOUT NIH

**THURSDAY, FEBRUARY 2ND, 2012**

**Thinking about applying to NIH? Questioning whether your research project is appropriate? Wondering how NIH is different from NSF?**

Come hear social scientists answer these questions and discuss their experiences as reviewers and obtaining grant funding. FREE AND OPEN TO ALL

- \* Doug Anderton, Sociology
- \* Aline Sayer, Psychology
- \* Sally Powers, Psychology
- \* Jen Lundquist, Sociology, Moderator

**3:30-5:00 p.m. | W32 Machmer**

### Attention: All Graduate Students

Graduate student Advising Guidelines and forms for Master's, CAGS & Doctoral students are available and can now be completed online. After they are signed by both the student and faculty member(s), they can then be submitted to Linda Guthrie in the Graduate Program Office, 123 Furcolo, or by email ([lguthrie@educ.umass.edu](mailto:lguthrie@educ.umass.edu)). They are available at the following URL:

[http://www.umass.edu/education/academics/advising\\_guidelines.shtml](http://www.umass.edu/education/academics/advising_guidelines.shtml)

## **2012-2013 SCHOLARSHIP OPPORTUNITIES**

### **Application Deadline: Friday, February 24, 2012**

The School of Education is pleased to provide the following opportunities for financial assistance. The deadline for **all** the **2012-2013** scholarships described on this page Friday, February 24, 2012. See the School of Education website, <http://www.umass.edu/education/student/awards.shtml> for application forms.

*Scholarship recipients are strongly encouraged to attend the School of Education's Scholarship Donor and Recipient Reception on April 26, 2012, 5 p.m.*

#### **Janice Camby Endowed Scholarship**

Provides scholarship support to a student accepted or enrolled in a teacher preparation program in the School of Education. Students must be from economically disadvantaged areas and in good academic standing. Must complete FAFSA.

#### **Grace Norton Carney Scholarship**

This endowed scholarship is a large scholarship for students pursuing graduate degrees in the School of Education at the University of Massachusetts Amherst. Applicants must be a native or resident of Massachusetts within the last 10 years. Preference is given to students who hold an undergraduate degree from UMass Amherst, Framingham, or Bridgewater State College. Must complete FAFSA.

#### **Paul J. Carney Reasons to Give Scholarship**

Provides scholarship support to a student in a School of Education program who is not eligible for a Pell grant, but still has significant need. Applicants must demonstrate high academic achievement and complete a FAFSA.

#### **Richard J. Clark Memorial Scholarship for Teacher Education**

Provides financial support to a student in the Teacher Education and Curriculum Studies department within the School of Education. A GPA of 3.3 or better is required, as well as experience with community service, internships, employment that demonstrates a commitment to excellence and equity.

#### **Early Childhood Education Graduate Student Fund**

Provides funding for students studying young children and their families with preference given to the study of the needs of the gifted and talented. To provide opportunities for students to enhance their academic experience and become involved in outreach. .

#### **Marylin Haley Scholarship**

Provides funding for eligible students based on financial need. Preference will be given to graduate students majoring in secondary teacher education, early childhood and elementary teacher education, reading and writing, or special education.

#### **Meline Kasparian Scholarship**

Provides support to students who are attending or who would like to attend the University of Massachusetts Amherst and who have exhibited a desire to become public school teachers. Applicants must be accepted or currently enrolled in a teacher preparation program.

#### **Joseph W. Keilty Memorial Scholarship**

This endowed scholarship is a large scholarship to support full-time graduate students. Students with a demonstrated financial need, high academic performance, and exceptional promise are encouraged to apply. Preference is given to doctoral students. Must complete FAFSA.

#### **Helen Eaton Timson Scholarship**

Provides scholarship support to a deserving student in a School of Education program.

#### **C. Lynn Vendien Endowed Scholarship**

Provides scholarship support to graduate students from foreign countries. Preference will be given to students who are affiliated with Physical Education Teacher Education in the Department of Teacher Education and Curriculum Studies.

#### **C. Lynn Vendien Professional Prize Award**

This prize will be awarded to a doctoral student who is studying Physical Education Teacher Education in the Department of Teacher Education and Curriculum Studies.

#### **Winifred Green Scholarship**

Awarded by Kappa Delta Pi Honor Society and sponsored by a professional organization of retired teachers in Massachusetts, this scholarship provides support for an undergraduate or graduate student enrolled or planning to enroll in a Teacher Licensure Program, who is committed to make a significant difference in the lives of young people in the commonwealth. Awardee must be in good academic standing, a permanent resident of Massachusetts, and have need for financial assistance. Awarded separately.

## **Please come to the TECS Elementary Mathematics Candidate Research Talk!**

Jill Neumayer DePiper University of Maryland Monday, January 30

**JAN. 30**

### **"What Can I Do?" The Role of Understandings of Self in Learning to Leverage Student Thinking in Math Teaching**

#### **Abstract:**

There is an emerging consensus in education research that elementary teacher preparation should support teacher candidates in the development of high-leverage practices (Ball & Forzani, 2009; Grossman, Hammerness, & McDonald, 2009). In mathematics teaching, high-leverage practices include eliciting, analyzing, and responding to students' ideas and reasoning (Kazemi, Franke, & Lampert, 2009; Ball, Thames & Phelps, 2008). A focus on student thinking in teacher professional development can be a powerful mechanism for linking pedagogy, mathematics (or science) content, and student thinking and for encouraging teachers to enact ambitious pedagogical practices (Kazemi & Franke, 2001; Windschitl, Thompson, & Braaten, 2011). It is less clear, however, how to support teacher candidates to attend to and leverage student thinking in their mathematics teaching. I will discuss how developing an understanding of self as mathematics teacher may relate to teacher candidates' capacity both for leveraging student thinking as a pedagogical practice and for making sense of their relations to the complex dynamics in schools. In particular, findings suggest emergent tensions of leveraging student thinking in the actual socio-political contexts and institutional constraints of schooling. Implications for mathematics teacher education and research extensions will also be discussed.

**The lecture will take place at 1:00 PM on Monday, January 30 Room 20 Furcolo Hall**

## **Please come to the following TECS Elementary Mathematics Candidate Research Talk!**

Tracy Johnson University of Cambridge Wednesday, February 1st

**FEB. 1**

### **Improving the Development of Mathematical Knowledge for Teaching: Analyzing Preservice Teachers' Practice Using the Knowledge Quartet<sup>1</sup> and Educative Experiences<sup>2</sup>**

#### **Abstract:**

I shall present a study which examined preservice teachers' development of Mathematical Knowledge for Teaching (MKT) over their final year in a university-based teacher education program in the southeastern United States. The study design employed a new methodology, termed situated case studies, in which tiered participation resulted in extensive data for three focal preservice teachers as well as a comparison to larger groups of their peers through interviews, focus groups, written reflections and a quantitative measure. A new protocol for coding elementary preservice teachers' mathematics lessons was developed to extend Rowland et al.'s (2009) work on the Knowledge Quartet model. Dewey's philosophy of educative experience was also operationalized to analyze the preservice teachers' experiences over the year. Based on the data, suggestions for improving teacher education will be offered.

*1 Rowland, Turner, Thwaites & Huckstep (2009)      2 Dewey (1938/1963)*

**The lecture will take place at 2:00 PM on Wednesday, February 1st Room 225 Furcolo Hall**

## **Please come to the TECS Elementary Mathematics Candidate Research Talk!**

Meghan Shaughnessy, University of Michigan Monday, February 6

**FEB. 6**

### **Parts of a Whole: The Teaching and Learning of Rational Number**

#### **Abstract:**

Students' persistent difficulties with rational number concepts are widely documented. Teachers, too, find the topic challenging to teach. Moreover, research on teachers' mathematical knowledge often reveals gaps in their own understanding. Given the foundational importance of rational number concepts to students' success with algebra, these pervasive difficulties warrant systematic study and intervention. In this talk, I will discuss three interrelated strands of work in which I am engaged with the goal of contributing to improvements in teaching and learning of this important mathematical topic. In one strand of work, I systematically investigate students' thinking about fractions and decimals in order to improve the precision of instructional interventions. In a second strand, I draw upon that work to design and study rational number instruction. The third strand focuses on teacher education, and my work to design and enact professional learning opportunities for pre-service and practicing teachers.

**The lecture will take place at 1:00 PM on Monday, February 6 Room 20 Furcolo Hall**

## **Please come to the TECS Elementary Mathematics Candidate Research Talk!**

Darrell Earnest University of California, Berkeley Thursday, February 9

**FEB. 9**

### **Investigating a Learning Trajectory for Graphing Linear Functions in Upper Elementary School**

#### **Abstract:**

To ensure that students are successful in algebra in the secondary grades, it is critical to engage elementary students in algebraic reasoning and problem-solving. Research and standards now recommend that young students work with algebraic representations, such as graphs, that traditionally have been reserved for older students. Yet we have limited evidence of the ways that young students understand algebraic representations or how instruction may support their learning. In this talk, I present my research, which addresses the questions: How do elementary students interpret properties of a graph? How can a task sequence enable students to build on their intuitions about spatial representations of quantities and prepare them for graphing linear functions? I present findings from two coordinated studies. Study 1 is an investigation of 5th graders' understandings of three kinds of spatial representations of quantities: number lines, the coordinate plane (perpendicular number lines), and linear function graphs. Study 2 is an investigation of an instructional intervention designed to support a learning trajectory for graphing linear functions. The intervention was designed as a tutorial game in which mathematical properties of the representations are made explicit in game play. Pre-to-post measures indicate Grade 5 game players improved significantly with a large effect size as compared to a control group, and qualitative analyses reveal the character of students' understanding as they solve problems with spatial representations of quantities. Findings from both studies have implications for the design of curriculum and instruction in early algebra. The results point to the promise of organizing a curriculum around the big mathematical ideas of spatial representations to support generative understanding of linear function graphs.

**The lecture will take place at 2:30PM on Thursday, February 9 Room 20 Furcolo Hall**

# Please come to the TECS Elementary Mathematics Candidate Research Talk!

Leslie Dieteker, Michigan State University Monday, February 13

**FEB. 13**

## **Framing a Mathematics Lesson as a Story: A theoretical window into the aesthetics of a mathematics lesson**

### **Abstract:**

This study provides an analysis of an enacted first grade mathematics lesson by re-conceptualizing it as an unfolding story. The goal is to address an age-old problem in mathematics curriculum; that is, how can we stimulate a learner's interest in mathematics? This interpretive lens enables the study of how a sequence of curricular events can evoke anticipation and affect how future parts are experienced by a student. Using classroom videotapes and interviews, this lesson was subdivided into four sequential events and analyzed using a literary framework that focuses on character, action, and plot. I will explain how the mathematical characters and actions are developed and change throughout the lesson and how this may have resulted in surprising conflict, necessitating resolution. Based on this work and other analyses I have conducted for my dissertation research, I argue that this framework provides beneficial ways of thinking about mathematics curriculum for teachers, as well as those engaged in curriculum research, design, and implementation.

**The lecture will take place at 11:00 AM on Monday, February 13 Room 20 Furcolo Hall**

### **The Center for Research on Families presents**

#### **FAMILY RESEARCH GRANTS & AWARDS**

**Application Deadline: Friday, February 17, 2012 Notification: March 9, 2012**

For More Information: [www.umass.edu/family/students](http://www.umass.edu/family/students). Contact [wendy@sbs.umass.edu](mailto:wendy@sbs.umass.edu) with questions.

#### **GRADUATE STUDENTS**

##### **CRF FAMILY RESEARCH FELLOWSHIP**

\$10,000 award to a graduate student with the potential to make an outstanding contribution to the field of family research.

##### **CRF FAMILY RESEARCH METHODOLOGICAL STUDIES AWARD**

Funding for graduate student(s) who wish to attend CRF's Summer Methodology Workshops at UMass Amherst.

##### **CRF FAMILY RESEARCH TRAVEL AWARD**

\$300 to a graduate student(s) with an outstanding paper/poster on issues of family research who will be presenting at a national research conference.

#### **UNDERGRADUATE STUDENTS**

##### **CRF FAMILY RESEARCH ASSISTANTSHIP**

\$3000 to an undergraduate student(s) with the potential to make an outstanding contribution to the field of family research. Student(s) will assist a faculty member with his/her research on families.

##### **CRF FAMILY RESEARCH HONORS THESIS/CAPSTONE PROJECT AWARD**

\$500 to recognize the honors thesis research of an outstanding UMass undergraduate student(s) focused on family issues.