

Professions **E**ducation **R**esearcher **Q**uarterly

Inside this issue:

issue:	
VP Message	1
Call for Nominations for Division I Awards	2
2010 Program Chair Report	3
Message from the Graduate Student Reps	4
Membership Report	4
Awards Reports	5
Summary of Plenary by Trudie Roberts	9
Photos from 2010 annual meeting	12
Position Announcement	14
Division I Officers	15



AERA Division I - Vice President's Message

Dear colleagues,

I hope you had a pleasant summer. The current issue of PERQ contains updates about some of the activities and reports by different committee chairs of Division I, as well as photos from the Denver meeting. In addition, there is a short summary of the keynote by Professor Trudie Roberts, and the Distinguished Career Award presentation by Michael Eraut. Overall, the year 2009 -2010 witnessed many important accomplishments, the most important of which was the highly successful annual meeting. I expect the year 2011 to be another banner year.

Over the past month, the Nominations Committee Chair, Linda Perkowski, and her committee members Larry Gruppen, Elizabeth Jordan, Summers Kalishman and Hugh Stoddard, finalized the list of candidates for the Vice President (three-year term) and Secretary (two-year term) positions. Both terms will start in 2012. A short bio of all the candidates will be published in the October issue of *Educational Researcher*. We would like to encourage all of you to vote.

On September 20, the Program Committee met in Seattle to review all the proposals submitted for the 2011 New Orleans meeting. The Committee members in attendance were Jack Boulet, Stan Hamstra, Lynne Robins, Ruth Streveler, Jennifer Turns and Ara Tekian. The meeting was organized by the 2011 Conference Chair Sara Kim.

At the AERA Council level, the Executive Board and the Council had a very productive retreat during the first weekend of July, under the leadership of the current President, Kris Gutierrrez. A summary report of the retreat appears in the October issue of *Educational Researcher*.

I would like to remind you that we are seeking nominations for the Outstanding Publications Award 2011 and the Distinguished Career Award 2012. See details for both these awards on page 2.

Since 2011 will mark the 40th Anniversary of the inception of Division I, we are planning to produce a commemorative booklet to review the history and contribution of Division I over the past 40 years and project our vision for the future. Ilene Harris and I plan to bring this project to fruition with the contribution of many present and past Division I officers.

If you have any suggestions for the upcoming 2011 Annual Meeting, or ideas for activities/ innovations for our Division, please drop me a note at tekian@uic.edu.

Also, please encourage all those who might be interested in education in the professions to join our Division.

I wish you all the best,

Ara Tekian



Nominations Sought for Division I Awards

Outstanding Publication Award 2011

Division I (Education in the Professions) of the American Educational Research Association (AERA) is seeking nominations for Outstanding Research Publication Award. The Outstanding Research Publication Award is given to a book, chapter, or peer-reviewed article that makes a significant contribution to research and theory with implications for practice in the field of education in the professions. This year, we are soliciting outstanding books published in 2009 and 2010 and articles published in 2010.

Publications considered represent either new research findings, the synthesis of existing work, or the creation or critique of current theory or practice. Research is defined as an active, diligent and systematic process of inquiry in order to discover, interpret or revise facts, events, behaviors, or theories, or to make practical applications with the help of such facts, laws or theories. A range of acceptable research methods encompasses quantitative and qualitative inquiry common in educational activities as well as natural inquiry leading to "thought" pieces of research. The Outstanding Research Publication Award committee will determine whether a particular nomination meets the criteria for review. While work from both members and non-members will be considered, priority is given to work by Division I members, since the purpose in giving awards is to recognize contributions of the membership. The Awards Committee will consider nominations for publications of non-members and self-nominated work, especially if the work is a substantial contribution that bears directly on the work of Division I members.

Nomination Process: Deadline for nominations is January 14, 2011.

Nominations must include the following: (1) a nomination letter or self-nomination letter; (2) disclosure of any conflict of interest with regards to the nominated work; (3) contact information for publishers for obtaining evaluation copies of the nominated work; and (4) contact information for the nominated author(s). Books without a formal nomination letter will not be considered for the award.

Distinguished Career Award 2012

The AERA Division I Distinguished Career Award is awarded every other year to an individual who has met the following criteria:

- Evidence of a significant impact on the field of research in the professions.
- Existence of a body of work on a topic over 10 years or more OR evidence that the research has significantly influenced the field.
- Service to the research community (editorial boards, reviewer).
- Evidence of contributions to the growth of new investigators (mentoring, teaching, final author position).
- Ability to communicate in effective ways with the end users (evidence of non-research seminars, essays, panels, invited presentations).
- Regular participation in Division I.

Nomination Process: Nominations for the 2012 award will be accepted on a rolling basis. **Final deadline for nominations is January 03, 2012.**

Nominations must include two letters of nomination detailing the nominees' contributions and the nominee's CV.

Division I is dedicated to promoting research and scholarship in education across the professions and internationally. Please refer to the Division I Web site for more information about the Division http://aera.net/divisions/?id=74.

Sincerely,

Arianne Teherani, PhD <u>arianne.teherani@ucsf.edu</u> & Carol Kamin, EdD <u>ckamin@uic.edu</u> Awards Committee Co-Chairs

2010 Annual Meeting Program Chair's Report

Dear Colleagues,

The Annual Meeting in Denver was, by all accounts, a huge success. Lots of interesting talks, networking with friends (old and new), good discussions over dinner with colleagues: all the elements that make for a productive and scholarly interchange.

I also want to acknowledge the excellent presentations given by Trudie Roberts (our invited speaker), and Ilene Harris, Susan Case and Michael Kane (our invited workshop facilitators). All of this could never have happened without the hard work of all the reviewers, the session moderators, the AERA central office staff, and the Program Committee.

I'd especially like to thank Ara Tekian for walking me through many of the details (and there were many!).

Oh!... and did I mention? The dinner at TAG restaurant was really good! (photos from the social pictured on this page).

Best of luck to Sara Kim, the 2011 Program Chair.

See you in New Orleans! (make sure you sign up for the social dinner).

Sincerely,

Stan Hamstra 2010 Division I Program Chair stan.hamstra@gmail.com









Christina Cestone

Graduate Student Representatives

Robert Ellis





Division I Graduate Student Representatives

We are delighted to announce that our newest Graduate Student Representative for Division I is Robert Ellis. Robert will serve as the Junior Representative, and Christina Cestone has moved into the Senior Representative position.

Robert is a 4th year doctoral student at The University of Texas at Austin, Department of Educational Psychology. His current academic work and research interests include: the development of an instrument to measure physician faculty effectiveness in an ambulatory setting at a pediatric teaching hospital; Inter-professional healthcare team case-based learning events, and the introduction of inter-professional healthcare team learning in pre-medical and early medical school curriculum.

Your graduate student representatives are planning an exciting fireside chat for the 2011 annual meeting in New Orleans. Look for details in the next issue of PERQ.

Membership Committee Report, Division I, 2010

My thanks to the Division I Executive Committee, Ad Hoc Strategic Planning Committee and the many individuals who are on the Division I Membership Committee. It takes a village of committee members to continue our outreach, to build our network and to support membership.

As of April 2010, we have 544 Members in Division I, a decrease from the 610 members we had in Spring 2009. This membership decline is a concern especially because we are one of the smaller divisions within AERA.

In late winter we sent invitations to faculty and administrators in Colorado universities and colleges and professional schools asking them or their designee to attend the AERA Division I meeting and program. While several declined, others responded positively to the invitation.

During the Annual Meeting, the Ad Hoc Strategic Planning Committee sponsored a breakfast meeting that the Membership Committee supported. The breakfast meeting was attended by new and returning Division I members and focused on strategic planning in Division I for both program and membership development. Lou Grosso and Ruth Streveler, co-chairs of the Strategic Planning Committee, will provide followup to ideas discussed at this meeting.

The Membership Committee and the village of other committee members associated with Division I spent time at the Saturday evening Division I reception held after the Division I business meeting networking with current, new and potential members getting acquainted or renewing friendships.

We are always interested in your ideas for membership and outreach or participation on the Membership Committee.

Thank you,

Summers Kalishman

Presentation of Awards at the 2010 Annual Meeting

Submitted by Carol Kamin and Arianne Teherani

2010 Awards Committee Co-Chairs

The 2010 Division I Awards was the result of the work of division members who put in considerable time attending sessions, reading, evaluating and discussing the large number of papers recognized as examples of outstanding scholarship. The announcements of these awards reflect many months of careful deliberations among the committee members. Congratulations to all of this year's recipients of the Division I Awards.

We presented two awards at the Division I Business Meeting in Denver for papers presented at the 2009 AERA meeting in San Diego. The winners were:

New Investigator Award: Fleurie Nievelstein and colleagues Tamara van Gog, Gijs van Dijck and Henny P.A. Boshuizen for their paper titled "Learning to Solve Legal Cases: The Effects of Instructional Support."

Established Investigator Award: Dr. Brian Hess and his colleagues, Drs.Rebecca Lipner, and Weifeng Weng for their paper, "A Methodology for Setting Performance Standards for Physicians in Clinical Practice."

We also presented the Distinguished Career Award (see article next page). The winner was:

Distinguished Career Award: Ilene Harris, PhD; University of Illinois, Chicago



Above: Fleurie Nievelstein and colleagues receive 2009 Award for Best Paper by a New Investigator.



Above: Dr. Brian Hess and his colleagues, receive 2009 Established Investigator Award.

Distinguished Career Award 2010 Presented to Dr. Ilene Harris

Dr. Eraut's presentation of the Career Award to Dr. Harris at the AERA 2010 Annual meeting in Denver:

Before I start, I would like to thank those who spent a lot of time in nominating and supporting candidates for this award; and also the members of our Committee who read a lot, thought a lot, appreciated the quality of all the candidates; and did a very professional job in reaching our conclusion.

It gives me great pleasure to present, on behalf of our Committee, the winner of the Distinguished Career Award for 2010, **Ilene Harris.** The breadth and depth of her research, her teaching and mentoring, and her contribution to capacity building, both locally and nationally,

helped us to understand just why Division I has this award.

Ilene started her 30 year commitment to the University of Minnesota Medical School in 1973, whilst also getting a PhD in Education (Evaluation, Curriculum and Philosophy) in the University of Chicago under Joe Schwab. She joined the University College of Education in 1983; then was promoted in both schools to Associate Professor (1986) and Professor in

1992. Then in 2003 she moved to the University of Illinois, Chicago, College of Medicine.

Her strength in qualitative research is rare in US medical education; and her success in pursuing it in two prestigious medical schools shows the quality of her work and her ability to engage with her students and her colleagues. Her nomination argues that by teaching formal courses in quali-

tative research, responding to many requests to design and implement workshops on qualitative design, and through writing and publishing her own qualitative research, Ilene has significantly influenced the field of educational research in the professions. Other "threads" that cross her body of work include investigations of curricular design and its application to different clinical settings, in particular, rural and community health settings.

For her mentoring efforts, Ilene received the All-University Award for Distinguished Contributions to Postgraduate and Professional Education from the University of Minnesota in 2003; and a nomination from Chicago also helps us to understand her ability to work with others.



Through a series of well orchestrated deliberations, Dr. Harris took what external reviewers characterized as the premier graduate program in health professions education and led and engaged the faculty in putting forward a renewed vision for the program that would foster the development of leadership and scholarship skills, two qualities that she clearly embodies herself, for future health professions educators. To the satisfaction of the faculty and the students and alumni, the reform led

to a wave of renewed energy and the development of innovative courses for the program and expected certificate and doctoral programs. The program is thriving as never before under her leadership.

Ilene has 93 peer reviewed articles, of which 29 were first authored. One nominator describes three key publications as follows. Her chapter on

Disntinguished Career Award, con't

Qualitative Methods in the International Handbook for Research in Medical Education (Norman & Van der Vleuten, eds., 2002) is a fundamental reference for any researcher doing qualitative work in the health professions. The same can be said for her paper in *Academic Medicine* on "What does 'The Discovery of Grounded Theory' have to say to Medical Education." One of her outstanding scholarly pieces, published in Academic Medicine, is her 20-year, longitudinal qualitative study of the outcomes and process of a mid-career sabbatical program for physicians, for which she received the Best Paper Award by an Established Investigator from the AAMC-RIME Conference (1997). Dr. Harris has made an additional impact on the field of professional education through her service to the research community. Ilene is an active member in several professional associations and has served in a leadership position for the AAMC and AERA. For the AAMC, Ilene served as founding chair for the Research in Medical Education Section (RIME), and has chaired the Central Group on Educational Affairs (CGEA). Ilene serves as a manuscript referee for 10 major journals as well as a reviewer for the NBME Stemmler grants and the US Department of Education. She received the Medical Education Laureate Award for Leadership, Faculty Development, Scholarly Standards and Contributions to the CGEA in 2001.

Her contributions to Division-I and the impact that she has on the field overall make her an ideal candidate for the Distinguished Career Award. One cannot mention qualitative research and curriculum studies without referring to Dr. Harris' scholarly work. Her involvement in the Division began over 30 years ago. She chaired the Nomination committee (1981-82) and then became secretary of Division-I (1986-88) and chaired the History committee (1986-89). In the nineties, she co-chaired (1993) and chaired (1994) the Division's annual program committee, then became chair of the Division and an AERA Vice-President in 1995. Please join us in congratulating Dr Ilene Harris for becoming the recipient of the AERA Division I Distinguished Career Award for 2010.

I would like to acknowledge and thank the members of the Distinquished Career Award subcommittee for Division I: David Irby, Kathleen King, Rebecca Lipner, Kathleen Edmonson and Gail Jensen.

Announcement by Dr. Michael R Eraut (Chair) Professor Emeritus in Education University of Sussex

2010 Established Investigator Award

The 2010 Division I Established Investigators award is given to **Dr. Douglas Hamman** and his colleagues from Texas Tech University T-Stem Center, F.L. Coward, A. Zaier and D. Fontenot for their paper, *Exploring the Relation Among Teachers, School Experiences, and Adolescents' Efficacy for Engineering Studies*. In their paper, Dr. Hamman and colleagues use a framework of social cognitive career theory to identify and discuss the contextual variables that influence students engineering self-efficacy including secondary schools and teachers influences.

There are two research questions addressed in this study.

- 1) How do efficacy and interest in engineering studies relate to school-based variables, like teachers and school activities?
- 2) Are there differences in students' self-report of these variables based on their temporal proximity to educational experiences in secondary schools?

Students who were undergraduate engineering majors, pre-college engineering majors, and secondary students were included in the study population. The authors compared students using these three groups (undergraduate engineering major, pre-college engineering major and secondary school) for engineering selfefficacy, interest in engineering and students' experiences with instructional and after-school



Established Investigator Award, con't

influences. In their results, the authors commented on the striking absence of differences among groups on these measures. The authors wrote that early influences from schools and teachers alone may not be sufficient in sustaining students' commitment to engineering studies upon entering the university. These findings have implications for current directions in STEM education reform at the K-12 level.

In giving this award, one member of the review committee commented that this "well written study addressed key findings on important problems that currently face education." Both the theory and methods used in this study are relevant to researchers with interest in studying the early and sustained interest of students entering and pursuing other professions.

I would like to acknowledge and thank the members of the Established Investigator Award subcommittee for Division I, Eugene Anderson, Carol Kamin, and Arianne Teherani, for the thoughtful review, comments and reflection they provided on the set of nominated papers.

Announcement by Summers Kalishman,
Subcommittee Chair

CONGRATULATIONS TO ALL THE AWARD WINNERS!

2010 Best Paper by a New Investigator Award

The 2010 New Investigator Award Committee agreed the winner of the 2010 Best Paper by a New Investigator is *Marjan Govaerts* and her colleagues, Lambert Schwirth, Cees van der Vleuten, and Arno Muijtjens. The title of the winning study is *Assessing Raters for Work-place-Based Assessment: A Cognitive Approach*.

Govaerts and her team investigated rater effect on cognitive processes in judgment decision making for selected clinical performance assessments. Based on the conceptual framework in cognition-based models of performance assessment and expertise research, her team conducted a quasi-experimental study. It compared effects by level of expertise defined as the number of years of task-relevant experience as a supervisor-rater in General Practice Training in Netherlands.

The study results supported the notion of rater variance in performance assessment. Further studies across different settings are suggested with an emphasis of the need for more qualitative approaches in assessment processes.

I would like to acknowledge and thank the members of the New Investigator Award subcommittee for Division I: Janet Riddle, Doug Ripke and Anne McKee for the thoughtful review, comments and reflection they provided on the set of nominated papers.

Announcement by Eunmi Park,
Subcommittee Chair

Scholarship: The Final Frontier

Summary of the Division I plenary AERA 2010 Denver given by Professor Trudie Roberts, University of Leeds

Although thought of as relatively recent in its emergence as a specialist area, medical education research has been conducted by individual doctors examining aspects of medical education ever since Paget's study on the outcome of doctors who studied at St Bartholomew's Hospital in 1869.

However much of the work done in this area under the heading of research has been of dubious quality. Rather than concentrate on the biomedical model of research I suggest that medical education would be better served by embracing the concept of scholarship in medical education. Working to enhance this scholarship we could more usefully enhance our students' (and our own) learning and teaching. The work of Boyer, Glassick, Huber and Maeroff from the Carnegie Foundation has informed my thinking of scholarship in this area: it is still a 'work in progress'.



Scholarship Reconsidered and Scholarship Assessed

What is scholarship? Historically universities had two roles: research or knowledge creation (the scholarship of discovery) and knowledge transmission (the scholarship of teaching). Given the continued information explosion, universities have increasingly a vital third role: that of transforming information into knowledge and then managing this new knowledge (the scholarship of integration). Additionally I would suggest that in medical education it is crucial that we support students in applying the knowledge they accumulate (the scholarship of engagement).

How could we measure scholarship in medical education? In 2007, Ronald Harden presented a model for measuring excellence in medical education which, although slightly tongue in cheek, is useful to consider as a starting point.

Excellence in the Scholarship of Teaching = Technical competence X approach to teaching X personal development

Perhaps more practically we could use the characteristics below as markers of an individual's commitment to excellence in the scholarship of medical education:

- Innovation
- Creativity
- Commitment to evaluation
- Commitment to quality improvement
- Leadership
- Commitment to personal development



Roberts' Plenary, cont'

Scholarship in Medical Education

Is medical education becoming more scholarly? In a very rough and ready look at two preeminent medical educational journals I found that there was increasing use of the concept of theoretical frameworks, particularly in the last decade. However when I looked at the number of medical education articles in mainstream education journals such as *Higher Education Quarterly*, *Journal of Curriculum Studies* and *Assessment and Learning in Higher Education*, with the exception of the area of assessment where over 50 articles had been published in the last ten years, other medical education publications were exceedingly rare.

How Might We Go Forward?

I identified 15 successful medical education units. I defined 'successful' as units who were:

- -recognisable as a definite group
- -providing speakers at international meetings on a regular basis

and whose staff:

- -present work at the main international meetings
- -publish regularly in main stream medical education journals

When I examined their websites they had the following characteristics in common:

- Well defined vision and goals
- Charismatic leader providing a nurturing environment
- Defined identity of a critical mass of people
- Mix of professional backgrounds
- Local, national and international visibility
- Add value locally
- Acknowledged standing within their institute
- Strong graduate programmes
- Attract external research students/fellows
- Seek strategic collaborations
- Track record of high quality publications
- Attract external funding
- Good succession planning
- Reactive to local, regional and national environments

My conclusion from this was that a critical mass of dedicated skilled individuals with a strategic focus is a pre-requisite for a successful unit.

The Model of Scholarship in My Own Unit

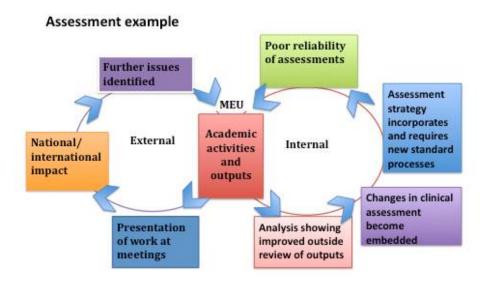
In Leeds we are developing a model of scholarship that we believe will allow us to demonstrate a measureable worth to our institution, teaching programmes and students. This is shown in the first figure on the following page:



Roberts' Plenary, cont'

Leeds Scholarship Model Identification of issues/ **Further issues** challenges identified MEU Scholarship Academic informed medical External National/ Internal activities education international and impact outputs Adoption of outputs into practice Practitioner **MEU** expertise (local impact) dissemination evaluation/ /influence pilots

and below is an example of the model in action:



What is the role of Division I in the development and promotion of scholarship in medical education?

I would suggest the following areas are worthy of consideration:

- Develop strategic influence with policy makers
- •Aid the development of young scholars
- •Provide a platform for the presentation of high quality relevant practical research which is well theorised
- Facilitate the development of fruitful collaborations between the professions and that we need to 'go boldly' to take this agenda forward.

2010 Annual Meeting in Denver



Above: Denver Convention Center

Below: Along 16th St. Mall Denver



Above: AERA Executive Committee Meeting, Denver 2010

Below: Pre-meeting with Junior Faculty and Graduate Students







Above: Division I program officers Sara Kim and Ara Tekian (back) Stan Hamstra and Ilene Harris (front)

2010 Annual Meeting in Denver



Left: Student Orientation



Left: Mentoring Breakfast

Below: Ilene Harris, Trudie Roberts, Dorthea Juul and

Marcia Mentkowshki



Below: Lou Grosso, Hugh Stoddard, Stan Hamstra and Summers Kalishman, at Executive Committee meeting





Announcements

Director Faculty Development

(Faculty Position)

Tufts University School of Dental Medicine seeks candidates for the position of Director of Faculty Development. The position is available beginning July 1, 2010. The Director of Faculty Development will design, implement and evaluate faculty development programs for teaching faculty across the four years of dental education and will also be in charge of all faculty development, faculty calibration, and the use of technology in teaching/learning at TUSDM. A primary focus for the Director will be on enriching faculty teaching skills and increasing the use of technology to enhance and improve teaching (both didactic and clinical) and to keep pace with and update current methods of curriculum delivery for our students. The Director will collaborate with the TUSDM and Tufts University Information Technology Departments, the Tufts' Academic Technology Department (UIT) and with various instructional design specialists, interactive media designers, and learning technologies developers.

This is a full-time faculty position at the rank of Director. Salary will be commensurate with the candidate's qualifications and experience. Requirements include a Ph. D. (or other appropriate/relevant doctoral degree) or a Masters Degree in Education, a minimum of 3-5 years experience in a dental education setting, experience in curriculum development and change, faculty development, and/or educational administration.

The successful candidate for this position must have a strong background in teaching and technology, and have excellent computer and technology skills. The successful candidate needs excellent interpersonal, communication, organizational, and needs public speaking skills.

The committee will begin reviewing applications upon receipt and will continue to accept applications until the position is filled. Applicants should send curriculum vitae, a statement describing their scholarly and simulation accomplishments and interests, and names and addresses of at least three references to:

Associate Dean Nancy Arbree Academic Affairs Tufts University School of Dental Medicine,

PERQ

Professions Education Researcher Quarterly

PERQ is the official newsletter of Division I (Education in the Professions) of the American Educational Research Association. Current division officers and committee chairs are:

Vice President (2009-2012):

Ara Tekian, University of Illinois, Chicago

Vice President-Elect (2009-2012):

TBD

Past Vice President:

Patricia O'Sullivan, University of California San Francisco

Secretary (2008-2010):

Christine Taylor, Cleveland Clinic

Secretary-Elect (2010-2012):

Katherine Edmondson, Cornell University

Members-at-Large:

Janet Hafler, Tufts University

Paul Wimmers, University of California, Los Angeles

Chair, 2011 Program Committee:

Sara Kim, UCLA

Chair, Affirmative Action Committee:

Hugh Stoddard, University of Nebraska College of Medicine

Co-Chairs, Awards Committee:

Carol Kamin, University of Illinois at Chicago Arianne Teherani, University of California, San Francisco

Chair, Membership Committee:

Summers Kalishman, University of New Mexico

Chair, Nominating Committee:

Linda Perkowski, University of Minnesota Medical School

Co-Chairs, Publications Mentoring Committee:

Maria Blanco, Tufts University

Bridget O'Brien, University of California, San Francisco

Co-Chairs, Ad Hoc Strategic Planning Committee:

Ruth Streveler, Purdue University

Louis Grosso, American Board of Internal Medicine

PERQ Editor:

Carol Thrush, University of Arkansas for Medical Sciences

Web Liaison:

Majka Woods, University of Minnesota Medical School

Graduate Student Representatives:

Christina Cestone, University of Texas, Austin

Robert Ellis, University of Texas, Austin

Member Liaison to Graduate Student Committee:

Dorthea Juul, American Board of Psychiatry and Neurology, Inc.



Professional Education Researcher Quarterly (PERQ)

is published three–four times a year and is available on the Division I website, http://www.aera.net/divisions/?id=542. Announcements for new issues are posted on the Division I listsery.

Suitable publications for PERQ include official notices to the Division I membership, articles, descriptions of research in progress, reviews of research, book reviews, letters, and announcements of jobs, funding, or events judged to be of interest to researchers in professions education. Publication of such items is dependent on available space. Materials should be submitted using APA style (in MS Word, .rtf or .txt format) to:

Carol Thrush, PERQ Editor

University of Arkansas for Medical Sciences 4301 W. Markham St., Slot 595 Little Rock, AR 72205

thrushcarolr@uams.edu

PERQ is archived on the Web at:

http://www.aera.net/divisions/
Default.aspx?menu id=80&id=542