"The Vision Thing": Educational Research and AERA in the 21st Century—Part 5: A Vision for Educational Research and AERA in the 21st Century

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Editor's note: This is the fifth in a series of mini-feature articles by former presidents of the American Educational Research Association about the future of the association and educational research in general. These commentaries and the other brief articles in this series were gathered and submitted by Jane Stallings, a former association president. They were originally presented in two symposia Dr. Stallings organized for the 1996 AERA Annual Meeting in New York City. The symposia featured presentations by presidents from 1963–1964 to 1993–1994. All but two of the original presenters agreed to have their work included in this series. The papers have been grouped topically and, in some instances, shortened by the features editor.

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Patrick Suppes: AERA President 1973–1974

ithout a doubt, the best established broad generalization in the whole arena of human psychology concerns the great individual differences that exist in almost any dimension we care to study, from musical aptitude to running marathons or doing mathematics. On the other hand, this robust and sturdy, well-established fact about human capabilities of all sorts is not properly taken advantage of in the schools.

In our hearts, we, like most other educators, have a natural egalitarian view toward learning, not just toward opportunities to learn, which is the really important conviction we must have, but also in terms of the results of learning. For example, evidence is often produced that students who do not learn quickly in one grade catch up in the next grade. This is certainly true, and plenty of evidence can be produced to support it. Yet it remains that one of the most robust statistical conclusions about student performance is the Bayesian one that students who did best last year will in general be the ones that do best in the current year. It is this robust statistical generalization that we need to accommodate to more. Let us suppose, to take mathematics as my favorite example, that the difference between the bottom 15% and the top 15% of students in mathematics will, on average,

differ by three quarters of a year in grade-placement achievement. This implies that by the end of the sixth grade, there should be more than 4 years' difference in mathematics achievement, and if this story continues, by the end of 12 years, around 9 years' difference. These numbers sound fantastic in terms of what we currently expect as a range of achievement in any high schools in the country. But this is simply because we do not put the kind of emphasis on pushing ahead the best students in mathematics the way we encourage the best tennis players, the best basketball players, or the best football players even though the football players do not start quite so early as I am considering here.

So what we need in research is real exploration of the outer ranges of individual differences. We need the kind of educational experiments, backed up by serious research, to show how much can be done. An important point, or what I might call the real egalitarian point, the serious one for me, is that almost no individuals are talented across the board. The first-class musician may be a rather poor writer or a mediocre mathematician. The superb young mathematician whirling away at calculus in the fifth grade may be a rather mediocre basketball player and not at all a budding biological experimenter. Capabilities are diverse. This diversity should be emphasized in ways it is not now so that each student feels that he or she has a niche in which he or she is among the best. The slogan of the schools should be "Excellence for all," but the substance should focus on the individual capabilities of different students.

What sort of research is needed to support schools committed to such a vision of excellence? For those who have an affection for the current fashion of qualitative research, I say, benignly, that it is better to do qualitative research than none at all, but most certainly it is best, as it is in other scientific domains, to work within the framework of mathematical theory and quantitative tests of these theories whenever possible. I am a long-term admirer of the magnificent efforts of Edward Thorndike in the early part of this century to make educational psychology not only a scientific but a quantitative discipline. I want to represent in some way his views and what I believe would be his sense of disappointment at the absence of better mathematical and quantitative theorizing about students' school learning and performance at the end of the present century.

Elliot W. Eisner: AERA President 1992-1993

y aim in this brief statement is to identify two trends that I see emerging that I believe will have a significant impact on the educational research community and on AERA as the preeminent organization concerned with educational research. First among these developments is the emergence of new ways of doing educational research, particularly new methods and new criteria for its assessment. It is clear through inspection of the indices of AERA annual meeting programs over the past decade that there has been a slow but dramatic increase in the number of papers devoted to qualitative research. Initially, in the early 1970s, qualitative research was thought to be a newcomer whose form was essentially a version of ethnography. At present, the picture has become complex and richer. We are now seeing what is referred to as "alternative forms of data representation." Educational scholars have turned to the exploration of nonliteral, symbolic forms such as narrative to visual forms such as film and video and even to forms such as readers' theater and to approaches to research that are unabashedly rooted in the arts and humanities. The dominance of quantification and correlation and experimental research methods has given way to what might be regarded as more interpretive approaches to the study of educational practice, to the illumination of schools and their neighborhoods, and to growing and more complex conceptions of the ways in which information is processed, stored, and retrieved. Indeed, even the concept of information has given way in many quarters to the concept of meaning; educational researchers are increasingly interested in understanding the ways in which students and teachers make sense out of the world. This growing interest in alternative forms of data representation is itself rooted in alternative epistemologies. Even "epistemology" is too severe. "Epistemology" in Greek philosophy refers to true and certain knowledge. Phronesis, wise practical judgment, is being seen increasingly as a more reasonable orientation to the ways in which human action can be studied and revealed.

Interest in these new approaches to method has, in my opinion, enriched the scope of educational research. It has opened up roads to the study of educational practice that are better suited to the temperaments and interests of many educational researchers. Methodologically speaking, we have become more catholic and less parochial, and I don't expect this trend to cease. My hope is that we will achieve a rich methodological pluralism that provides options not only for senior researchers, but for doctoral students trying to define research problems that make sense to them.

A second development in the educational research community is directly related to the first. In the 1960s, there was a high degree of clarity—even certainty—about what constitutes educational research. Statistical methods were the main vehicles, and science the modality. At present, we are less sure. My own view is that science is a species of research; research is not a species of science. Put another way, there are many ways and forms in which to do research, including ways rooted in the arts and humanities. This expansion in the concept of research itself should not be interpreted to mean that "anything goes." Those who are concerned about "anything goes" are likely to be hard pressed to find anyone who believes it. What we need is an enriched pluralism in the ways in which we think about human un-

derstanding and the sources of its enlargement. The field is making headway in this regard even if, at the same time, it is creating some degree of uncertainty in the minds of some as to how to appraise work that does not fit neatly under conventional umbrellas.

Because some work cannot be assessed through conventional criteria, there is sometimes a tendency to dismiss it because it does not model traditional canons. I would argue that the criteria to be applied to any form of work should be guided by the features of the work itself. One does not apply criteria appropriate for appraising the quality of cubist painting by importing criteria that are appropriate for impressionist works of art. Wisdom in this matter consists of understanding the genre and using criteria that suit it. "Rigor," if that is the right word, is different in different fields and in different forms.

Julian C. Stanley: AERA President 1966–1967 (with Margarete Parrish)

ducation is foundering on many relatively new problems, one of the most important being extensive teenage pregnancy. Children have children, drop out of school, often opt for their own (substandard) "digs," and have more children. Many of them are subsidized by Aid for Families With Dependent Children. Their children may have severe learning problems caused by prematurity and their child-mother's inability to obtain prenatal care. Poverty, neglect, physical and sexual abuse, delinquency, truancy, substance abuse, mean streets, and the like may all contribute to a continuing cycle of educational inadequacy. When the children of children themselves bear children, expensive efforts to improve their offsprings' education may prove too little and too late.

This is a national emergency, likely to continue getting worse. Shouldn't educational researchers devote more of their time and effort helping adolescent girls defer child-bearing until they are educationally, emotionally, socially, and vocationally ready to become capable mothers? Compared to most current curiosity- or promotion-driven educational research, isn't this much more important for the future of society? I propose that teenage girls be encouraged to use long-term, maintenance-free contraceptive methods such as Norplant, IUDs, or Depo-Provera and that they be *paid* regularly to continue doing so up to age 20 or so. Instead of paying a girl if she has children, as we currently do, I suggest that a reverse-payment procedure be tried.

Educational researchers, along with other professionals, would be needed to research many aspects of this proposal: incentives; educational, social, political, legal, ethical, and religious considerations; allegations about side effects; effects on sexual behavior and sexually transmitted diseases; and especially, effects on age of childbearing. Researchers could determine whether the strategy that I have proposed increases educational levels, reduces delinquency and crime, and promotes vocational self-sufficiency.

I suspect that this type of proposal may be considered racist, genocidal, euthanistic, and victimizing of the poor by some. It is no more those than any other voluntarily used contraceptive method would be. A 20-year-old woman has at least 20 years of childbearing left. Effective contraception would eliminate the need for many abortions. It would also decrease the number of unplanned, unwanted births. It would increase the physical, mental, and educational

well-being of people from any socioeconomic stratum who choose to defer their first pregnancy until they believe themselves educationally, emotionally, socially, and financially ready.

Is this a proper concern for educational researchers? I suggest that you look through the annual AERA programs and try to pick out projects you consider more important for the future of education and civilization in the United States than focusing a variety of efforts on moving up the age at which girls bear their first child. There lie great educational, psychological, sociological, legal, and public health challenges and many opportunities for educational researchers to help meet them.

Maxine Greene: AERA President 1981-1982

istening to the predictions of my colleagues, I am impressed once again by the quality of their cumulative work, but at once, I have a feeling that few of them have chosen to come to terms with the cultural and intellectual changes already altering the face and substance of our nation. For one thing, it is entirely likely that the population of the United States will be largely Hispanic (with immigrants from Central and South America as well as the islands of the Caribbean) and that problems having to do with racism and class differences will have to be seriously addressed if we are to continue as a democracy. We will be coping with new modes of awareness, unfamiliar approaches to time and death and history, unpredictable ways of adapting to the post-industrial world.

All this will feed into the dilemmas of teaching literacy. There are bound to be new approaches to matters of assessment and to the setting of standards. We will no longer be able to take for granted commitments to such ideals such as equity and freedom. Individualism itself, like community and the public sphere, cannot but be reconceived. Much as we like to imagine a kind of universality where our present notions of knowing and valuing are concerned, we are going to have to confront the facts of contingency and multiplicity of perspective as demographical changes proceed. At once, as the challenge of fair distribution intensifies, we will have to look again at the presumed advantages of computer learning as described today. Who, under circumstances of inequitable distribution, has the right to develop the software and, indeed, decide what is to be transmitted and to whom? It is difficult to anticipate what is likely to happen without taking into account questions of distribution and questions of what is likely to happen in a society where large groups remain comparatively untaught and uninformed. To look simply from the vantage point of the technologically sophisticated may well be to overlook crucial deficiencies and distinctions already threatening to tear apart the social fabric.

Clearly, there must be expanded inquires into teacher education to supplement research on higher learning. Questions having to do with "other people's children," with socialization in altered environments, with accommodations to the breakup of families, with multilingual classrooms: All these are going to demand more and more significant research. We may find ourselves (or those who follow) inventing new concepts of schooling and teaching as market demands alter, as schools open more and more to worlds of work we cannot yet anticipate. And surely we will have to

confront policy questions arising out of shifting social and cultural arrangements as they affect schools.

The fact that one of my colleagues chose to talk about Norplant for welfare mothers must draw attention to the importance of identifying perspective and background knowledge where even accomplished scholars are concerned. It would seem that the day of men speaking for and about women as if they were able to take "a view from nowhere" has long passed. Although the colleague I have in mind now has a female co-author, I believe we all have to keep reminding ourselves of the necessity of paying heed to gender considerations, even as we take into account situations and points of view. As important in looking ahead is the need to recognize the changes in the content of many research studies due to the entry of increasing numbers of women into the field. Health issues, child welfare issues, family issues, children's narratives: All are drawing and will draw attention, in part because of the ongoing work of women scholars. I might also add the current interest in the ethics of care and its relation to problems of community.

Finally, I am impelled to speak in the light of some of my own preoccupations and say a word about the importance of the arts and humanities in the work to be done in the 21st century. Reading an essay by George Steiner in *The New Yorker* this morning, I was reminded of the intellectual power in great novelists like Marcel Proust and Robert Musil. I would add poets like Adrienne Rich, Muriel Rukeyser, and John Ashbery and a great many others. I mention this because my conception of the future of educational research makes me envisage a greater role for imagination, a greater reliance on metaphorical thinking, and a greater openness to the visions of human possibility opened by our artists in the present and the past. It is time to break through old dichotomies, time to acknowledge the "blurring of the disciplines" and the role of richly multiple "realities."

As I try to summarize what the future looks like to my very prejudiced eyes, I keep hoping that (in years to come) we will not feel impelled to appear on television like Robert McNamara and tearfully confess that we were wrong; we simply did not know.

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See the November issue of Educational Researcher for the registration form and information about the 1999 AERA Annual Meeting. The January—February issue of Educational Researcher will list association-sponsored addresses and awards, divisional highlights, and photos and profiles of some of the featured speakers.