Toward a New Mainstream of Education & Workplace Opportunity for All

The challenge of Scientific Research and sustained application: Eric Cooper National Urban Alliance for Effective Education February 1, 2002

The Bush administration is making a gallant push toward stressing the need for "scientific-based research" which allows educators to move away from intuition and experience toward one based on evidence. Ellen Lagemann, president of the Spencer Foundation, former professor of history at Columbia's Teachers College, protege of Lawrence Cremin and author of numerous books, one of note is, Private Power for the Public Good, was recently quoted in "Education Week, January 30, 2002, "I don't think it's academic research in the traditional sense...It's got to be a combination of applied and basic research that's aimed at solving the problem, not at generating more research." Dr. Lagemann goes on to say, "We have tended to think that if you do research and get results, that will be useful to practitioners...There's an intermediate step. You have to take the results of research and build it into toys, tools, tests, and texts. You have to build it into things that practitioners can use. They can't use the conclusions of a study."

What have we learned from both applied and basic research? What has both qualitative and quantitative research provided us over the years. David Berliner, one of the giants in education research and theory, has summed it up well in the same Education Week discussed above, "Law Mandates Scientific Base for Research -- Researchers Wonder: Who Decides if Studies are Scientifically Based?". Dr. Berliner suggests that "...policymakers have largely ignored well-established research on such topics as the beneficial effects of high-quality preschools and the harmful effects of holding students back a grade." Additionally Berliner has argued in other publications for: high quality engaged sustained academic time for students; the elimination of special education labels; the importance of focusing on higher-order thinking skills; the negative effects of academic tracking, and the impact of teacher belief systems on learning. The purpose of this communication is twofold. It is meant to begin an unpacking of educational research and theory in a form that attempts to communicate to the law team working on the important financial equity case, Johnson v Rowland in the state of Connecticut (in part building on Abbott/NJ), and to help begin the conceptual rollout of the IRA/NUA's Urban Partnership for Literacy, set to be launched this month in support of what many urban educators have urged, i.e., "there is a need for organizations to begin to collaborate more forcefully on behalf of students many don't think are capable of accelerated learning." The writer's goal is that those copied and others who this communication will be shared, will help to shape future engagements around applied conceptual models which can further knowledge dissemination in urban, metropolitan and rural communities.

What has research suggested to us over the years? I will attempt to frame an answer based on what we have learned from cognitive and intelligence theories (basic/traditional

research) as well as correlational data emerging from effective schools' research (applied). For purposes of this communication, I will use a conceptual listing framework rather than a deep explanatory process to help with brevity and hopefully usage:

Intelligence Theories

The matrices studies conducted by Devlin and associates at Carnegie Mellon in the 90s concluded that intelligence is slightly more influenced by a child's upbringing than their genes. To an effect the Carnegie Mellon studies concluded that nurturance trumped nature by 52% - 48%. This research is an attempt to address the ongoing raging debate triggered, in part, by authors of The Bell Curve, who suggested through widely covered reports to the public, that funds spent on poor children of color is a waste of money because it results in hurting "those" people the money is intended to serve by steering them away from the lower-level aspirations and occupations that suit their abilities. The authors were supported in their writing by foundations such as the Pioneer Fund. They argued that there are genetic/heredity differences among the races -- with a heavy emphasis on African-Americans.

Yet research teams at Carnegie-Mellon, the Institute of Biological Studies and the Brookings Institutes have argued, "If people's intelligence is due mostly to heredity, as many experts [still] believe, why is it that IQ scores have been rising?" ("Researchers: Nature x Nurture = Startling Jump in IQs" -- Education Week, January 23, 2002). In very practical terms, Dickens and Flynn feel they have found an answer, "...the researchers say their theory also explains why the IQ gains that poor children make in Head Start fade in elementary school...Isn't it amazing that once [the children from Head Start are] tossed back into the environments in their ghetto schools that those gains seem to disappear?...The theory suggests, for example, that the brain is like a muscle that requires constant exercise to reach and maintain a level of peak performance."

The implications that I read into the above is that the work of Dewey, Piaget, Feuerstein, Delpit, Hilliard, Kozol, Freire, Bruner and Vygotsky (to name a few) continue to be verified for those willing to look backwards and frontwards in their review of the literature. The building blocks for understanding learning theories are well established, and sustained application through programmatic and structural interventions should be obvious to those willing to take/find the time for deeper engagement.

Effective School Research

Ronald Edmonds, an African-American researcher in the 1980s identified five characteristics of unusually effective schools. They are: high expectations for students, strong administrative leadership, emphasis on student learning of basic [and cognitive] skills, frequent monitoring of student progress, and maintenance of an orderly climate conducive to learning. A focus on these characteristics has been apparent at schools that consistently sustain high achievement for poor children of color and other students.

Additionally, districts and the NUA have helped to effectuate these characteristics by providing a common applied instructional focus, that enables staff to work together on the specifics of their development. These factors have been informed by collaborative

exchanges with school-based practitioners and scholar practitioners (those who have been able to integrate theory and research into effective practice and performance for diverse classrooms):

- 1. Practice-Oriented Staff Development at the Building-level.
- 2. Availability and Utilization of Instructional Support Personnel (coaches).
- 3. Focus on Acquisition of Central Learning Skills.
- 4. Emphasis on Higher Order Learning in Assessing Instructional Outcomes.
- 5. Active/Engaged Learning.

The five factors cited above that the NUA has used successfully, include: the use of Degrees of Reading Power (a comprehension assessment which enables the educator to make informed decisions about how to place students in material that are most effective for student learning while mediated by a peer or adult -- instructional zone/or Vygotskyian's zone of proximal development), or read independently; the integration of form (phonics) with meaning; the use of thematic and project oriented lessons that provide experiential and applied learning opportunities and which build on the particular prior knowledge of the student; the recognition of the role that language, cultural and cognition -- "These categories (which are framed on prior experiences of students based on their sociocultural environment) are the key to accelerating learning, for they are the frame of reference from which all meaning is constructed and communicated, and therefore the frame of reference on which all achievement depends" (Jackson).

Implementation: Administrative and Organizational Arrangements

The eradication of the achievement and workplace gap that exists between the wealthy and the poor will demand adherence to what we believe to be core fundamental principles which lead to sustained and systemic change. They include the following:

- 1. Increase financial support for school systems serving sizable numbers of poor children based on such factors as SES. The Administration's new educational bill may help to begin the improvement of financial support.
- 2. Establish "good" preschool experience -- not the custodial care often provided by some preschool programs in urban areas.
- 3. Mandate all day kindergarten programs.
- 4. Increase community involvement in, and support for, poor schools through creative public engagement that provide clear, accurate and timely information about student performance and practical ways of shrinking achievement gaps while raising the levels for all.
- 5. Eliminate the tracking system.
- 6. Establish increased accountability and evaluation for high student achievement. Increase engagements of university-based researchers and practitioners within urban classrooms. Create team teaching applications with scholar practitioners and teachers.
- 7. Transform big urban district middle and high schools into smaller learning units, e.g., thematic-based schools-within-schools, technology centers modeled on Stamford's Academy for Information Technology.
- 8. Provide provisions for continuing and sustained professional development.

- 9. Bridge gap between a child's first teachers (parents) and those who follow in pre-school/K12. Build on models such as those of Madison, Wisconsin which enable social workers to work in collaboration with teachers -- visiting the homes, mediating together in classrooms.
- 10. Establish thematic and experiential after-school and summer programs that do not repeat what may have failed for the student during the regular school year.
- 11. Create lessons, practicums, syllabus and material which can guide the educator through integrated and instructionally leveled thematic/interdisciplinary units.

So there you have it. This is obviously an attempt to help further the purposes of our collaboration so that we may accelerate on the high implementation underway in districts and schools working with the NUA and others. It is also, as discussed above, an attempt at synthesizing the literature and ongoing experience we have had in a manner which translates across educational boundaries, i.e., into the courts, communities, media outlets, state departments of education, community-based organizations, places of worship, homes and the Internet, so that belief systems begin to change regarding student capacity. The task is formidable but through collaborations such as those about to be set in motion via the International Reading Association/NUA and UP, reports developed and delivered through CGCS, university and institute based-research, child advocacy groups, and teacher unions, we can begin to intensify and accelerate the change process. We look forward to reactions and suggestions.

Submitted by Eric Cooper as a draft on behalf of our partnership February 1, 2002

