

January 16, 2007

COMMENTARY

Intelligence in the Classroom

 By **CHARLES MURRAY**
January 16, 2007; Page A21

Education is becoming the preferred method for diagnosing and attacking a wide range problems in American life. The No Child Left Behind Act is one prominent example. Another is the recent volley of articles that blame rising income inequality on the increasing economic premium for advanced education. Crime, drugs, extramarital births, unemployment -- you name the problem, and I will show you a stack of claims that education is to blame, or at least implicated.

One word is missing from these discussions: intelligence. Hardly anyone will admit it, but education's role in causing or solving any problem cannot be evaluated without considering the underlying intellectual ability of the people being educated. Today and over the next two days, I will put the case for three simple truths about the mediating role of intelligence that should bear on the way we think about education and the nation's future.

Today's simple truth: Half of all children are below average in intelligence. We do not live in Lake Wobegon.




Barbara Kelley

Our ability to improve the academic accomplishment of students in the lower half of the distribution of intelligence is severely limited. It is a matter of ceilings. Suppose a girl in the 99th percentile of intelligence, corresponding to an IQ of 135, is getting a C in English. She is underachieving, and someone who sets out to raise her performance might be able to get a spectacular result. Now suppose the boy sitting behind her is getting a D, but his IQ is a bit below 100, at the 49th percentile.

We can hope to raise his grade. But teaching him more vocabulary words or drilling him on the parts of speech will not open up new vistas for him. It is not within his power to learn to follow an exposition written beyond a limited level of complexity, any more than it is within my power to follow a proof in the American Journal of Mathematics. In both cases, the problem is not that we have not been taught enough, but that we are not smart enough.

DOW JONES REPRINTS

 This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers, use the Order Reprints tool at the bottom of any article or visit: www.djreprints.com.

- See a sample reprint in PDF format.
- Order a reprint of this article now.

Now take the girl sitting across the aisle who is getting an F. She is at the 20th percentile of intelligence, which means she has an IQ of 88. If the grading is honest, it may not be possible to do more than give her an E for effort. Even if she is taught to read every bit as well as her intelligence permits, she still will be able to comprehend only simple written material. It is a good thing that she becomes functionally literate, and it will have an effect on the range of jobs she can hold. But still she will be confined to jobs that require minimal reading skills. She is just not smart enough to do more than that.

How about raising intelligence? It would be nice if we knew how, but we do not. It has been shown that some intensive interventions temporarily raise IQ scores by amounts ranging up to seven or eight points. Investigated psychometrically, these increases are a mix of test effects and increases in the underlying general factor of intellectual ability -- "g." In any case, the increases fade to insignificance within a few years after the intervention. Richard Herrnstein and I reviewed the technical literature on this topic in "The Bell Curve" (1994), and studies since then have told the same story.

There is no reason to believe that raising intelligence significantly and permanently is a current policy option, no matter how much money we are willing to spend. Nor can we look for much help from the Flynn Effect, the rise in IQ scores that has been observed internationally for several decades. Only a portion of that rise represents an increase in *g*, and recent studies indicate that the rise has stopped in advanced nations.

Some say that the public schools are so awful that there is huge room for improvement in academic performance just by improving education. There are two problems with that position. The first is that the numbers used to indict the public schools are missing a crucial component. For example, in the 2005 round of the National Assessment of Educational Progress (NAEP), 36% of all fourth-graders were below the NAEP's "basic achievement" score in reading. It sounds like a terrible record. But we know from the mathematics of the normal distribution that 36% of fourth-graders also have IQs lower than 95.

What IQ is necessary to give a child a reasonable chance to meet the NAEP's basic achievement score? Remarkably, it appears that no one has tried to answer that question. We only know for sure that if the bar for basic achievement is meaningfully defined, some substantial proportion of students will be unable to meet it no matter how well they are taught. As it happens, the NAEP's definition of basic achievement is said to be on the tough side. That substantial proportion of fourth-graders who cannot reasonably be expected to meet it could well be close to 36%.

The second problem with the argument that education can be vastly improved is the false assumption that educators already know how to educate everyone and that they just need to try harder -- the assumption that prompted No Child Left Behind. We have never known how to educate everyone. The widely held image of a golden age of American education when teachers brooked no nonsense and all the children learned their three Rs is a myth. If we confine the discussion to children in the lower half of the intelligence distribution (education of the gifted is another story), the overall trend of the 20th century was one of slow, hard-won improvement. A detailed review of this evidence, never challenged with data, was also part of "The Bell Curve."

This is not to say that American public schools cannot be improved. Many of them, especially in large cities, are dreadful. But even the best schools under the best conditions cannot repeal the limits on achievement set by limits on intelligence.

* * *

To say that even a perfect education system is not going to make much difference in the performance of children in the lower half of the distribution understandably grates. But the easy retorts do not work. It's no use coming up with the example of a child who was getting Ds in school, met an inspiring teacher, and went on to become an astrophysicist. That is an underachievement story, not the story of someone at the 49th percentile of intelligence. It's no use to cite the differences in test scores between public schools and private ones -- for students in the bottom half of the distribution, the differences are real but modest. It's no use to say that IQ scores can be wrong. I am not talking about scores on specific tests, but about a student's underlying intellectual ability, g , whether or not it has been measured with a test. And it's no use to say that there's no such thing as g .

While concepts such as "emotional intelligence" and "multiple intelligences" have their uses, a century of psychometric evidence has been augmented over the last decade by a growing body of neuroscientific evidence. Like it or not, g exists, is grounded in the architecture and neural functioning of the brain, and is the raw material for academic performance. If you do not have a lot of g when you enter kindergarten, you are never going to have a lot of it. No change in the educational system will change that hard fact.

That says nothing about the quality of the lives that should be open to everyone across the range of ability. I am among the most emphatic of those who think that the importance of IQ in living a good life is vastly overrated. My point is just this: It is true that many social and economic problems are disproportionately found among people with little education, but the culprit for their educational deficit is often low intelligence. Refusing to come to grips with that reality has produced policies that have been ineffectual at best and damaging at worst.

Mr. Murray is the W.H. Brady Scholar at the American Enterprise Institute. This is the first in a three-part series, concluding on Thursday.

URL for this article:

<http://online.wsj.com/article/SB116892082599777371.html>

Copyright 2007 Dow Jones & Company, Inc. All Rights Reserved

This copy is for your personal, non-commercial use only. Distribution and use of this material are governed by our **Subscriber Agreement** and by copyright law. For non-personal use or to order multiple copies, please contact Dow Jones Reprints at 1-800-843-0008 or visit www.djreprints.com.