

Origins of Modern Testing in Public Schools

Background topics behind the discussion of high-stakes testing:

1. What is intelligence?
2. Intelligence as a quality, not a quantity.
3. IQ: correlation v causality
 - a. Positive and negative correlations
4. Cultural capital and a connection to dialect (Thursday)
5. What is a dialect? (Thursday)

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Dr. Turner's Thesis:

Education is a fundamentally moral enterprise.

What do I mean by this?

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Education is a fundamentally moral enterprise

Education is about relationships between people, hence moral in the most basic sense.

For teachers, the moral questions concern how we treat each other in school.

How do we treat our students? Our fellow teachers? Parents? Administration? The wider school community?

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Can you “read” the story of the life of each student? Can you hear them tell their story? Can you respond with love and connection?

The stories we tell ourselves about how things came to be this way influence how we learn and they also influence how we teach. This is a significant factor for all human beings regardless of whether we are students or teachers.

Testing is one of those stories.

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What does it mean to be “well prepared” for school?

- At five or six, for kindergarten or first grade?
- At seventeen, eighteen or nineteen for a four year college?

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What a man is depends on his character; but what he does, and what we think of what he does, depends on his circumstances. The characteristics that ruin a man in one class made him eminent in another.

Introductory Essay, Major Barbara
George Bernard Shaw

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Cultural Capital

Definition:

Children are not simply socialized into the values of society as a whole. Rather, they are socialized into the culture that corresponds to their class and, in Bourdieu's terms, this set of cultural experiences, values, beliefs and so forth represents a form of "cultural capital."

That is, cultural capital is a set of values, beliefs, norms, attitudes, experiences and so forth that equip people for their life in society. These values, beliefs, norms, attitudes, and experiences translate into *social resources*, or, lack thereof.

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Is there a single thing in the head called “intelligence”?

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“Intelligence is a quality, not a quantity.”

What does this mean to you?

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Intelligence testing as used in most of our schools indicates we believe intelligence is “unitary.”

This is the one belief on the part of teachers most feared by Alfred Binet, the originator of IQ testing (1857-1911).

What the advent of IQ testing meant to some prominent observers at the time...

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It was not until I was long out of school and indeed after the (first) World War that there came the hurried use of the new technique of psychological [IQ] tests, which were quickly adjusted so as to put black folk absolutely beyond the possibility of civilization.

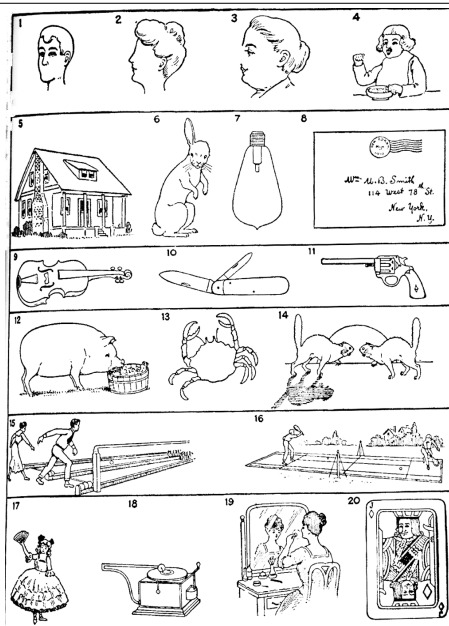
-- W. E. B. Du Bois, 1940. As quoted in Robert V. Guthrie, *Even the Rat Was White: A Historical View of Psychology* (2nd edition) (Boston: Allyn & Bacon, 1998), p. 55.

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IQ tests and the social agenda of their advocates roused critics right from the start. To the journalist Walter Lippmann, the intelligence-testers were "the Psychological Battalion of Death," seizing unparalleled power over every child's future. Lippmann and Terman dueled in the pages of the *New Republic* in 1922 and 1923. "I hate the impudence of a claim that in 50 minutes you can judge and classify a human being's predestined fitness in life," Lippmann wrote. "I hate the sense of superiority which it creates, and the sense of inferiority which it imposes." [...] Though he could never match Lippmann's eloquence, in the end Terman won the war: intelligence testing continued to spread. By the 1930s, kids with high IQs were being sent into more challenging classes to prepare for high-earning jobs or college, while low scorers got less demanding coursework, reduced expectations and dimmer job prospects.

Mitchell Leslie, in the *Stanford Magazine*, July/August, 2000. Stanford was the academic home of Louis Terman.

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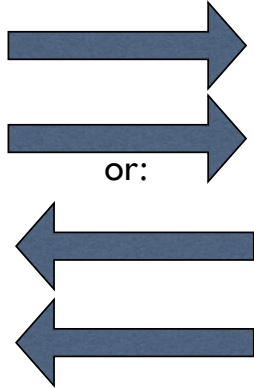
Example test page from the Army Beta test, 1918

5 • 5 Part six of examination Beta for testing innate intelligence © Gayle M. Turner 2015-2016

Positive v. Negative Correlations

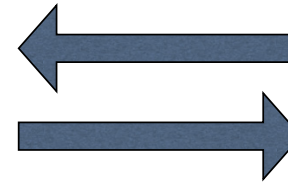
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Positive Correlation:



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Negative Correlation:



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Origins and History of IQ testing with some modern implications (continued)

- a. Increased biases regarding dialects
- b. Fear of schools and science in certain parts of the population

IQ (intelligence quotient)

The importance of understanding the difference between “correlation” and “causality.”

The hookworm example from 1918 (Gould pp. 247-248)

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The hookworm example:

“Low native ability may induce such conditions of living as to result in hookworm infection.” Yerkes, as quoted in SJ Gould, *The Mismeasure of Man*

Charles Spearman (1863-1945) observed that children's test scores on a wide variety of seemingly unrelated subjects in school were positively correlated.

His observation led him to posit the existence of something he called “general mental ability,” or *g*.

In Spearman's work, *g* is what underlies and shapes human cognitive performance. His postulate has broad support in the field of intelligence research, where it is known as the “*g* theory.”

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Spearman felt that the tests from which his *g* had emerged "had no place in schools" because they "deflected" teachers', pupils', parents' and politicians' attention from the business of education which, as the Latin root of the word implies, should be concerned with "drawing out" whatever talents a student may have.¹

1. Source: Wikipedia article on Spearman. I don't know the actual source of the quotation, but am looking for it!

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Alfred Binet and the Dangers of “reification”:

Factor analysis, despite its status as pure deductive mathematics, was invented in a social context, and for definite reasons. And, though its mathematical basis is unassailable, its persistent use as a device for learning about the physical structure of intellect has been mired in deep conceptual errors from the start. The principal error...[is] reification--in this case, the notion that such a nebulous, socially defined concept as intelligence might be identified as a “thing” with a locus in the brain and a definite degree of heritability--and that it might be measured as a single number, thus permitting a unilinear ranking of people according to the amount of it they possess.

—in Stephen Jay Gould, *The Mismeasure of Man*

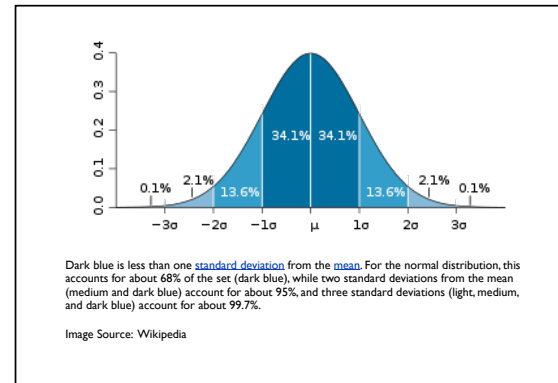
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The Case of Sir Cyril Burt

- Data fabrication
- An intense belief that intelligence is inherited influencing the experiment to the point of fraud. (Gould pp. 264-265, and the conclusion reached by Burt's authorized biographer, Leslie Hearnshaw)

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The Normal Distribution Curve



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Ask yourself: "What is the intent of this test?" Is it

- a test for achievement?
- a test for ability?

What's the difference?

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Small groups

1. Discuss the Lemann article using your questions and reflections from your reading and processing notes.
2. What additional question or questions do the article and the lecture today raise for you with regard to modern testing programs in schools?