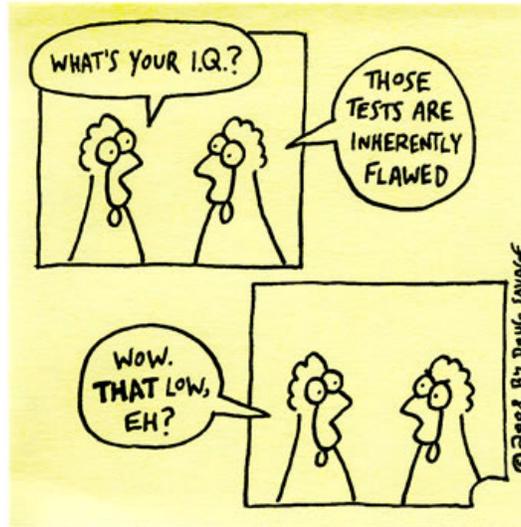


AP Psychology

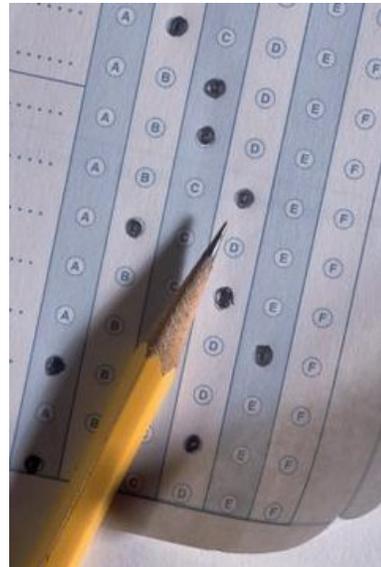


8.2 – Testing Intelligence

Development of Intelligence Tests

• Types of Tests

- Achievement Tests
 - Measure what you already have learned.
 - Examples: Literacy tests, Driver's license tests, Final exam in a psychology course
- Aptitude Tests
 - Attempt to predict your ability to learn new skills.
 - Examples: SAT, ACT, and GRE



Development of Intelligence Tests

• Alfred Binet (1857-1911)

- French psychologist who designed a series of tests to measure the mental abilities of school children
 - Focused on mental abilities such as memory and the ability to distinguish similarities and differences
- Soon discovered that brighter children performed like older children
 - This led Binet to make a distinction between a child's mental age and a child's chronological age



Development of Intelligence Tests

• Alfred Binet (1857-1911)

- Used his new test to compare an average score each age level. He then compared each child's performance against the average abilities of a given age group.
- For example, if a child's score was the same as the average score for a group of 8-year-olds, the child was said to have the mental age (MA) of an 8-year-old, regardless of his/her chronological age (CA)



Development of Intelligence Tests

• Lewis Terman (1877–1956)

- Terman revised Binet's test and created the *Stanford-Binet Intelligence Scale*
- Binet used the following formula to determine IQ:
 - $IQ = (MA/CA) \times 100$
- Example: An 8-year-old boy who has a Mental Age of a 10-year-old would have an IQ of 125
 - $(10/8) \times 100 = 125$



Stanford
BINET
Intelligence Scales

Development of Intelligence Tests

• David Wechsler (1896–1981)

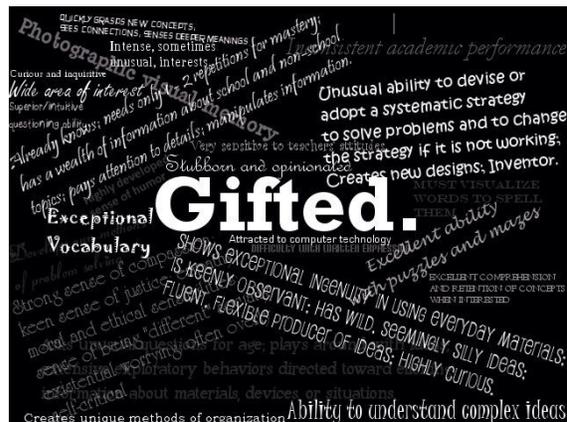
- Strongly believed that intelligence involved a number of mental abilities
- First published the *Wechsler Adult Intelligence Scale (WAIS)* in 1955
 - Featured separate verbal and performance scores
- Used Standard Deviation to determine the IQ Scale
 - Used by most IQ Tests today
- Also developed tests for preschool and school-age children



Extremes of Intelligence

• Intellectual Giftedness

- “Intellectually Gifted” is applied to individuals who score significantly above average in general intellectual functioning
- Only about 1%-3% of people are classified as being intellectually gifted
- Does NOT guarantee success in career or relationships
 - Lewis Terman’s “Termites”



Heredity vs. Environment

• Heredity

- Studies of identical twins support the hypothesis that intelligence is inherited
- Studies of adopted children show that their IQs are more strongly correlated with their biological mother's IQ than their adoptive mother's IQ

• Environment

- Studies of identical twins also support the hypothesis that environment plays an important role
 - Raised separately vs. Raised together
- Studies also find that early enrichment programs can have a positive impact on children's IQ scores

