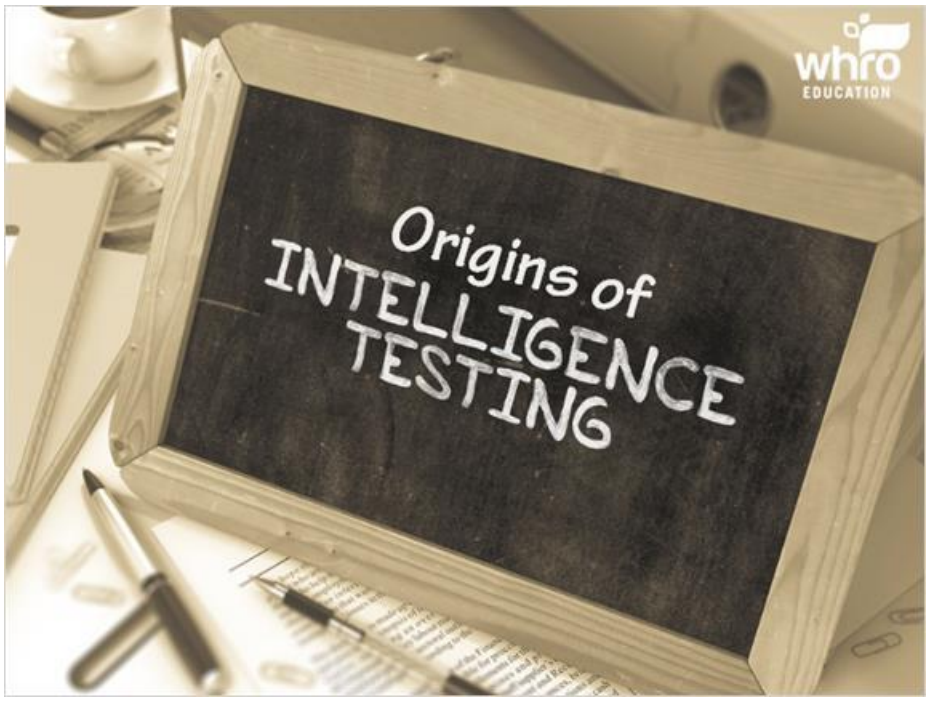
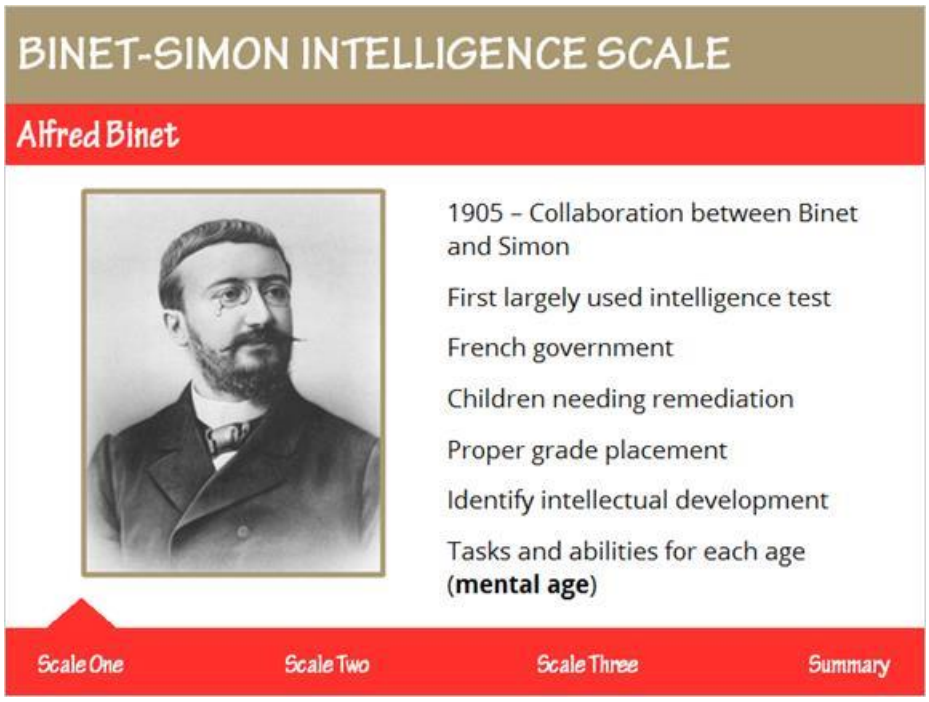
Module 6: Learning and Memory
Topic 5 Content: Intelligence

Instructions



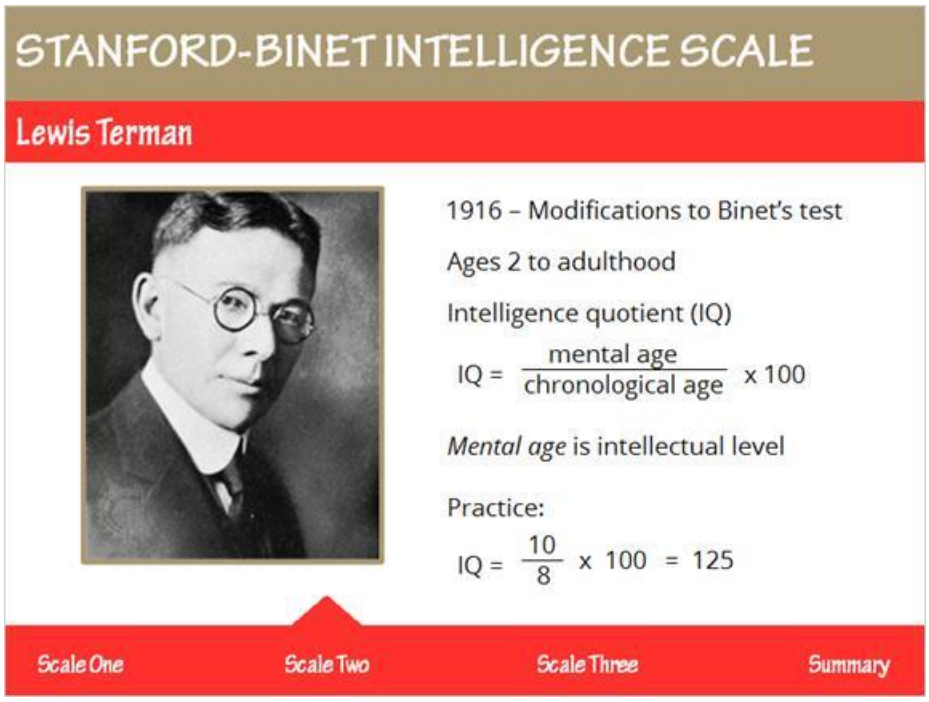
Click the tabs at the bottom of the screen to discover the origins of intelligence testing. Click the ***NEXT*** button to begin.

Binet-Simon Intelligence Scales



In 1905, Alfred Binet collaborated with Theodore Simon to design the Binet-Simon Intelligence Scale. This was the first widely used intelligence test, which was developed after the French government required a means to educate children in need of remediation. To offer this education, children needed to be placed in the appropriate grade level. The French government asked Binet, who was part of a professional group for child psychology, to create a test that would help with proper grade placement by identifying the intellectual development of each child. Binet created a list of tasks and abilities for each age. He referred to this as *mental age*. For example, if a typical five-year-old child should know numbers, colors, and the alphabet, then each five-year-old was evaluated according to this list. If a child knew the tasks of an older mental age, then he or she was considered above average.

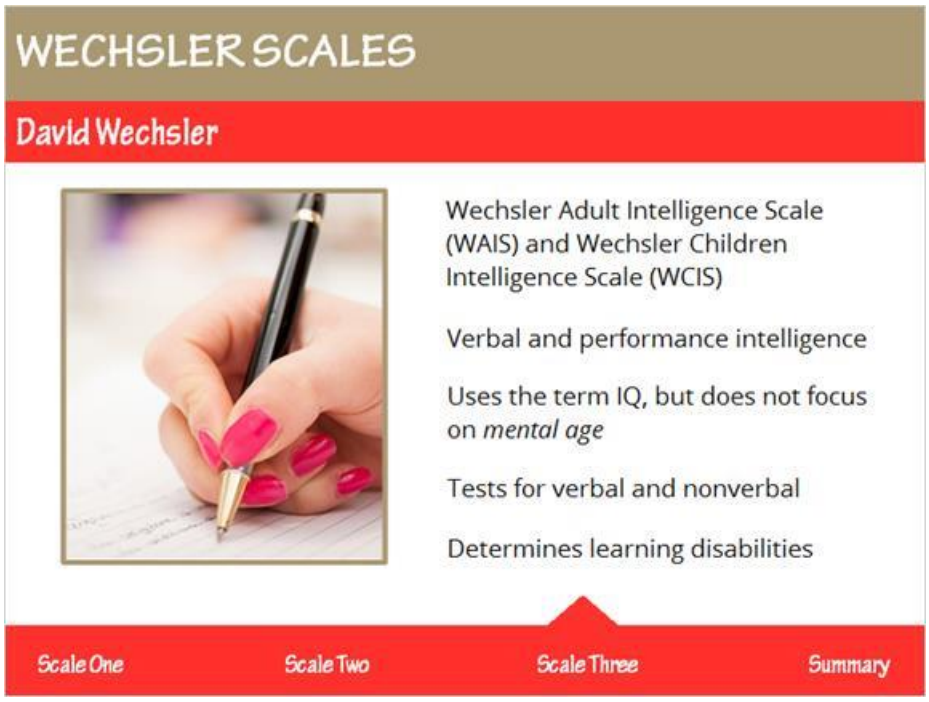
Stanford-Binet Intelligence Scale



Stanford University professor Louis Terman modified Binet's test in 1916, calling it the Stanford-Binet Intelligence Scale. Like the Binet-Simon Intelligence Scale, this intelligence test helped place children in the proper academic setting. It also helped identify intelligence in people ranging from age two to adulthood. You may have heard the term "IQ" before. This stands for intelligence quotient, and originates from the quotient used to express the test results. Specifically, IQ was computed using the following: the quotient of mental age divided by chronological age times one hundred.

Mental age refers to the intellectual level of a child. For example, if a child has a mental age of eleven, she functions like an average eleven-year-old, even if that is not her actual age. Take a moment to practice using the formula for IQ. To calculate the IQ of an eight-year-old with a mental age of ten, use the formula to plug in a mental age of ten, and a chronological age of eight. You find this child has an IQ of one hundred twenty-five. The average score on an intelligence test is one hundred. For children who do not score as well as most children their age, their IQ scores will fall below one hundred; and for children who score higher than most children their age, their IQ scores will fall above one hundred.

Wechsler Scales



Although the Stanford-Binet is still used, the most popular intelligence tests for children and adults were developed by David Wechsler and are the Wechsler Adult Intelligence Scale (WAIS) and the Wechsler Children Intelligence Scale (WCIS). These scales have different subtests that measure particular intellectual skills related to verbal or performance intelligence. With both subtests, participants must use reasoning abilities to answer questions. Verbal intelligence uses words and ideas by asking questions like, *How many nickels make a dime?* Or *In what ways are a circle and triangle alike*? Conversely, performance skills test spatial relations by asking participants to arrange pictures in sequential order or identify missing parts of a picture.

While the Wechsler Scales use the term IQ, it does not focus on defining mental age like the Stanford-Binet Intelligence Scale. In addition, the Stanford-Binet scale only measures verbal abilities, while the Wechsler Scales hone in on verbal and nonverbal abilities and can be used to determine if people have learning disabilities.

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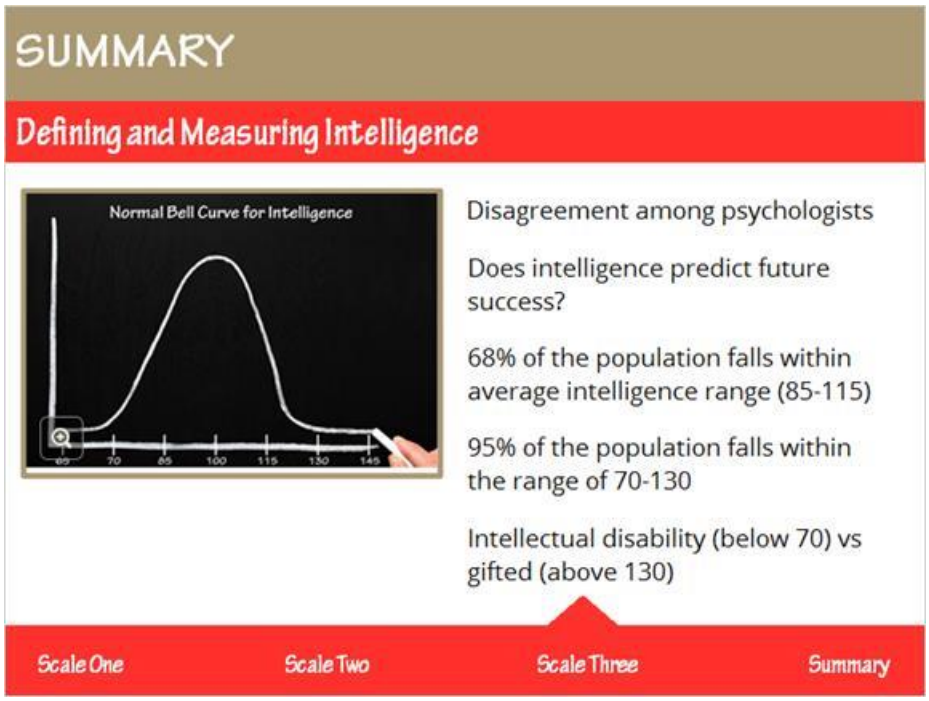
Summary



While the Stanford-Binet Scale and Wechsler Scales are highly used, psychologists often do not agree on how to define or measure intelligence. Even if intelligence could be accurately measured, questions remain as to whether it predicts a person's future success.

The normal bell curve reveals that about sixty-eight percent of the population falls within the average intelligence range of eighty-five to one hundred fifteen. And ninety-five percent of the population falls within the range of seventy to one hundred thirty. Someone with an IQ below seventy would be considered to have an intellectual disability. Someone with an IQ above one hundred thirty is considered gifted.