Although it is hard to overstate Leonardo da Vinci's brilliance, recent scientific research reveals that you probably underestimate your own capabilities. You are gifted with virtually unlimited potential for learning and creativity. Ninety-five percent of what we know about the capabilities of the human brain has been learned in the last twenty years. Our schools, universities, and corporations are only beginning to apply this emerging understanding of human potential. Let's set the stage for learning how to think like Leonardo by considering the contemporary view of intelligence and some results of the investigation into the nature and extent of your brain's potential.

Most of us grew up with a concept of intelligence based on the traditional IQ test. The IQ test was originated by Alfred Binet (1857–1911) to measure, objectively, comprehension, reasoning, and judgment. Binet was motivated by a powerful enthusiasm for the emerging discipline of psychology and a desire to overcome the cultural and class prejudices of late nineteenth-century France in the assessment of children's academic potential. Although the traditional concept of IQ was a breakthrough at the time of its formulation, contemporary research shows that it suffers from two significant flaws.

The first flaw is the idea that intelligence is fixed at birth and immutable. Although individuals are endowed genetically with more or less talent in a given area, researchers such as Buzan, Machado, Wenger, and many others have shown that IQ scores can be raised significantly through appropriate training. In a recent statistical review of more than two hundred studies of IQ published in the journal *Nature,* Bernard Devlin concluded that genes account for no more than 48 percent of IQ. Fifty-two percent is a function of prenatal care, environment, and education.

The second weakness in the commonly held concept of intelligence is