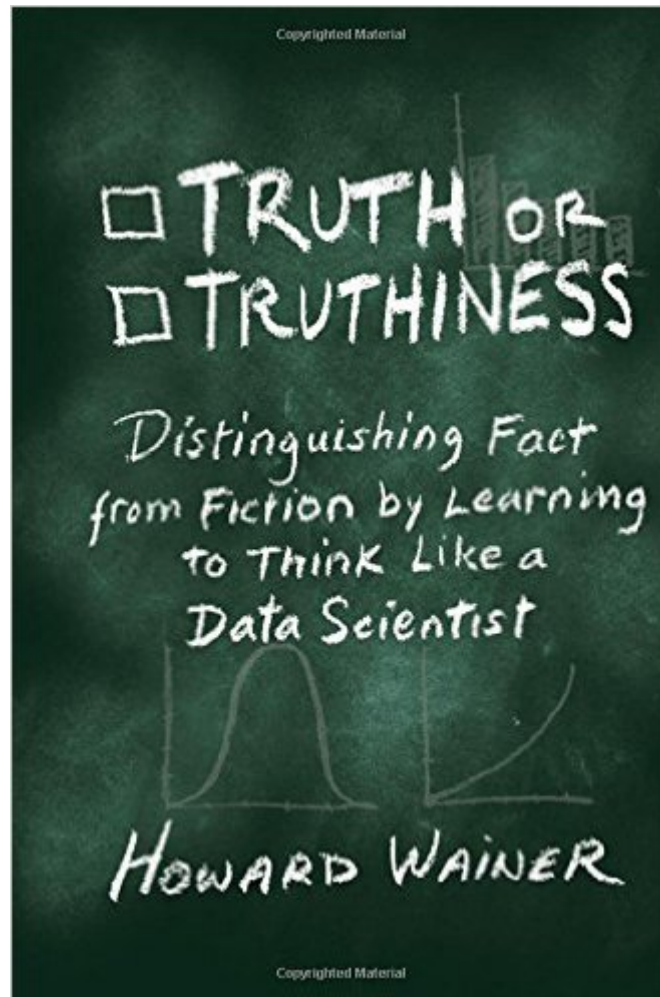# Truth Or Truthiness: Distinguishing Fact From Fiction By Learning To Think Like A Data Scientist

Synopsis

Teacher tenure is a problem. Teacher tenure is a solution. Fracking is safe. Fracking causes earthquakes. Our kids are over-tested. Our kids are not tested enough. We read claims like these in the newspaper every day, often with no justification other than 'it feels right'. How can we figure out what is right? Escaping from the clutches of truthiness begins with one simple question: 'what is the evidence?' With his usual verve and flair, Howard Wainer shows how the sceptical mindset of a data scientist can expose truthiness, nonsense, and outright deception. Using the tools of causal inference he evaluates the evidence, or lack thereof, supporting claims in many fields, with special emphasis in education. This wise book is a must-read for anyone who has ever wanted to challenge the pronouncements of authority figures and a lucid and captivating narrative that entertains and educates at the same time.

Book Information

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Customer Reviews

So much of what we know is just wrong. From internet facts to everybody knows that, we make things up and believe them, with nothing backing them but the knowledge that we all agree we knew that. And yet, by shifting slightly, Howard Wainer says we can outsleuth Sherlock Holmes.Wainer demonstrates it in a remarkable lawsuit where he was called into aid a â œprofessional licenseâ • exam taker who was falsely accused of cheating. Wainer showed the evaluation system, which looked terrific at first blush, was actually terribly inaccurate and unjustifiable. Wainer compares it to mammography, a parallel system that shows the same misguidance. In mammography, false positives rule. In breast cancer cases, only five percent of positive mammographies represent actual

cancer. He shows this from mammographyâ ™s own impressive (at first) numbers. Testing for cheaters â " no better. Ruining someoneâ ™s career over such lousy methods â " unacceptable. Who said statisticians couldnâ ™t be cool?Wainer shows convincingly that fracking does cause earthquakes, that tenure in education is actually cheaper than hiring annually, that global numbers predict the breaking of sports records, and that the whole field of education is rife with truthiness based on gut feeling (and outright criminally rigging results).He says there are three reasons why people wonâ ™t listen to the facts:-A lack of understanding of the methods and the power of the Science of Uncertainty-A conflict between what is true what is wished to be true-An excessive dimness of mind that prevents connecting the dots of evidence to yield a clear picture of likely outcome.The purpose â " and value - of Truth and Truthiness is in its applicability.

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