

Semantic Scales: Analyzing Evidence Example

Question: “Is technology making us stupider?” Claim: Yes, technology is making us stupider because it is addictive and distracts us from deep thinking.
Evidence: “‘Technology is rewiring our brains,’ said Nora Volkow, director of the National Institute of Drug Abuse and one of the worlds’ leading brain scientists. She and other researchers compare the lure of digital stimulation less to that of drugs and alcohol than to food and sex, which are essential but counterproductive in excess.” (Quoted from Richtel, Attached to Technology and Paying a Price. *New York Times*, June 6, 2010)

SAFETY OF EVIDENCE/ACCEPTABILITY AND VERIFIABILITY

X

Is Safe, can be agreed upon

Unsafe, Illogical and Untrue

BECAUSE: *Dr. Volkow is cited as a top expert on drug abuse and the brain. We can point directly at her quote. We were able to look her up and confirm her as an expert and confirm her viewpoint on technology as addictive, distracting and something that is rewiring our brains. So this evidence is safe. We can agree she is an expert and that she said and thinks this.*

AUTHORITY OF SOURCE/s

X

Positive

Negative

BECAUSE: *The New York Times is a credible new source, and Matt Richtel is an award-winning journalist.*

REPLICABILITY OF EVIDENCE

X

Repeated/Replicable

Not repeated/Not replicable

BECAUSE: *The rest of the article cites several other experts who also believe that the brain is being rewired in ways that are highly addictive, that distract us, and that keep us from concentrating or thinking deeply about issues over time. Some of the other articles we read also confirmed this point of view. We did not give this our strongest rating because there are experts who argue that technology makes us smarter in some specific ways like visual acuity and reaction time.*

Relevance of Evidence – ON-POINTNESS

X

Clearly Relates to Topic

Does not relate to topic

BECAUSE: *The evidence doesn't directly support our claim that technology is making us stupider, but it is very supportive of that claim if we reason about the evidence to show that most people give in to the addictiveness and are distracted, which keeps them from deep thinking and understanding.*

Validity of Evidence – COLLECTION OF DATA IS SOUND

X

Sound collection of data

suspect collection/methodology

BECAUSE: *This quote and the following commentary comes from a carefully researched article about the brain and computers and this is a direct quote from a recognized expert. We assume that the author Richtel, as an award winning journalist, tape recorded the conversation and cross-checked the quote and its meaning with Dr. Volkow.*

Sufficiency of Evidence

X

Enough Evidence to convince audience

Not Enough Evidence

BECAUSE: *We don't think this quote alone is going to convince our audience of peers who love their smartphones and pads. But by adding other evidence about the effects of smartphones and technology on the brain, we think that we will have sufficient evidence by showing a pattern of agreement among brain scientists about the negative effects of tech on our concentration and on our deep thinking.*

NOTE WELL: STUDENTS MAY IDENTIFY OTHER FEATURES THAT MAKE STRONG EVIDENCE AND THOSE INSIGHTS CAN BE INCLUDED IN A SCALE SUCH AS THIS.