Intellectual Standards as an overall concept.

Intellectual Standards are the criteria used to evaluate our thinking. If we consider that our thinking is constructed using the elements of reasoning, then, in order to evaluate our thinking (evaluate our elements of reasoning), we would use the intellectual standards to evaluate or assess our reasoning.

There are a wide variety of intellectual standards, of which there are around eight or nine standards which are universal - this means that we can always apply them to our reasoning, regardless of what we are reasoning. The universal standards consist of:

Clarity -Clearly identifying the problem or issue for which we are reasoning. That is, eliminating ambiguity or alternate meaning of an issue or problem. Tools we can use to achieve clarity are for example reframing the problem, using examples and illustrations and asking for clarification.

Accuracy - This standard aims to ensure statements are in line with reality. That is, a given statement is not misrepresented. Here there is no ambiguity in the statement, but the facts or information that the statement is purporting might not be correct. For example, stating that an apple is 100% organic is a clear statement, but may not be accurate if the apple has been treated with chemicals In pursuit of accuracy, we could ask questions that seek to verify the statement, for example how could we check to see if that is accurate?

Precision - Precision relates to providing sufficient information or detail for the user to exactly understand or get meaning. That is to say, what additional information, and how exact should this information be to provide meaning. For example, when asking how much fuel we have in our ear, an approximation such as half a tank or quarter tank would suffice and provide sufficient meaning compared to an answer of 14.55 Litres. Other times we may need more precision, for example when formulating medicine, exact amounts such as 20.225 grams may be required to ensure effectiveness and safety.

Relevance- Are the statements connected to the question at hand. That is do the statements bear upon the question or reasoning at hand? For example, a statement such as "It is Wednesday 10th January 9.30 am' has no relevance on the weather and only serve to throw us off track if we were reasoning about the weather.

Depth - Depth relates to how thoroughly we look into problems. That is, rather than superficially considering a statement or issue we consider the issue in detail. We may even consider second and third order effects and related concepts. For example, if we are considering the environmental impact of vehicles, a statement such as - Electric cars are 100% emission free lacks depth. It does not consider emissions in the production of vehicles, or the emissions in the production of fuel to power them among others.

Breadth - Relates to failing to consider issues or statements from multiple viewpoints. That is, we pursue a single angle instead of considering other angles. For example, following an ideology such as a religion or a sect blindly without considering viewpoints of other religions or sects.

Logic - Logic is how we arrange our thoughts and understanding of the world. When these thoughts and understandings form a repeatable pattern or combination, we can say that this is logical. For example, we know that the logic of gravity is what causes objects to fall down to earth. Therefore if we throw an object up in the air and it does not fall down to earth, then we can say that this is not logical.

Significance- relates to the most important information that relates to the reasoning at hand. That is, it relates to the information that will have the largest impact on our reasoning. For example, if we consider weight loss, significant questions might be those such as what is a healthy way to lose weight? What is the logic behind weight loss ? What is a healthy weight for my body ? rather than a trivial question like how many hours do I need to walk every day in order to lose weight