## Introduce distinction b/w deductive and inductive arguments

Inductive arguments will be described as *strong* or *weak* 

- -Rather than making conclusion *certain* (as in deductive reasoning), the aim of a strong deductive argument is to show that the conclusion is *probable*, or *likely to be true*
- -Strong: All observed crows are black. Therefore, all crows are black.

To notice: The premise doesn't *guarantee* that the conclusion is true. Famously, until Europeans traveled to Australia, a black swan had never been observed. An argument similar to the above might have been given to support the notion that all swans are white.

- -Other kinds of ideas that we hold pretty dear are supported by deduction rather than induction.
  - -Why do we believe the sun will come up tomorrow?
  - -Why do we believe that the law of gravity will continue to obtain five minutes from now?

Without induction, we'd be in a tough spot when trying to make many significant choices about our future.

-What types of arguments might you offer or consider when choosing where you will transfer for school?

Not all inductive arguments are strong, though. Here's one:

-I met a friendly person in San Francisco today. I bet everyone in this city is friendly.

Why is this weak?

-To notice: The assessment of inductive arguments may seem a little less precise than that of deductive arguments. Strength is a matter of degrees in inductive args, according to how likely the conclusion is once the premise is taken into consideration.