



The Question Formulation Technique™ (QFT™) for Science

1. **FOCUS:** The bosque is a dynamic and complex ecosystem
2. **Go To: BEMP.org/data-sets** and see what kind of data has been collected over the years. Don't get too deep into the data, just see what types of data are available.
3. **PRODUCE QUESTIONS**
 - **Four Essential Rules for Producing Your Own Questions:**
 1. Ask as many questions as you can
 2. Do not stop to analyze/discuss, judge or answer the questions
 3. Write down every question *exactly* as you think of it
 4. Change any statement into a question
4. **IMPROVE YOUR QUESTIONS**
 - Categorize your questions as investigable or non-investigable:
 - Investigable questions meet the following criteria:
 - I do not already know the answer(s) to this question.
 - Question leads to a plan for what I need to do to answer the question, including the evidence I need to collect.
 - This question can be answered with available material (the data available from BEMP.org or USGS.gov (river flow data)).
 - This question can be answered in a reasonable amount of time.
 - Write INV next to investigable questions
 - Cross out non-investigable questions or rewrite them so they can be investigated.
 - Categorize the questions as Closed- or Open-ended:
 - Closed-ended questions can be answered with "yes" or "no" or with one word.
 - Open-ended questions require an explanation and cannot be answered with "yes" or "no" or with one word.
 - Find closed-ended questions. Mark them with a "c."
 - The other questions must be open-ended. Mark them with an "o."
 - Write down the advantages and disadvantages of each type of question (open vs closed)
 - Change questions from one type to another:
 - Change one closed-ended question to open-ended.
 - Change one open-ended question to closed-ended.
5. **PRIORITIZE YOUR QUESTIONS**
 - Choose your three most important and testable questions.
 - Why did you choose these three as the most important?
 - Now choose your MOST IMPORTANT and TESTABLE question
6. **QUESTION TO HYPOTHESIS – re-write your question as a prediction statement (HYPOTHESIS)**

Adapted from materials provided by the Right Question Institute, Harvard University <http://rightquestion.org/>
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