

The Scientific Process Compared with Information Research Model

The information research process parallels in many ways how scientists work. They both involve problem-posing and problem-solving, critical thinking and evaluation of results. Usually both also involve some kind of presentation of results - e.g. as a student research project or a professional paper.

Critical thinking is involved at every step in both scenarios. In both cases you need to know if you have a real question, you need to know that you need more information. Both evaluate the validity of the results. In both you need to know if and how to modify your hypothesis or search strategy based on the results.

Scientific Method	Information Research Process
1. you pose a question	1. you pose a question
2. you develop several explanations (hypotheses) to answer the question	2. you develop a search strategy with several search terms to answer the question
3. you choose the 'best hypothesis to test	3. you choose the best search terms
4. you design an experiment to test your hypothesis	4. you determine the appropriate sources for information
5. you conduct your experiment	5. you search for the information
6. you evaluate your results	6. you evaluate your results
7. based on your results you decide the next step e.g. repeat experiment, modify hypothesis or experimental procedure	7. based on your results you decide the next step e.g. modify your search strategy or search question
8. presentation of results	8. presentation of results