

Simplifying Inquiry Instruction

Which model is suitable for each grade level?

Suitable for STEM?

Step 1: Notes (Record)

INQUIRY OR NOT

HOW MUCH INFORMATION ARE GIVEN?

- VARIABLES
- SOLUTIONS
- ANSWERS

1. Confirmation - results are known in advance
2. Structured Inquiry - teacher presented question thru prescribed procedure
3. Guided Inquiry - teacher-presented question only
4. Open Inquiry - open formulations and design

FIGURE 2

Modified version of the four-level model of inquiry.

How much information is given to the student?

Level of inquiry	Question?	Methods?	Solution?
1	✓	✓	✓
2	✓	✓	
3	✓		
4			

Step 3: Summary (Reflect and Review)

Scientific Investigation

Scientific Research

Engineering Design

Mathematical Problems

Research in General

Teach further skills as inquiry level gets complexed, e.g., how to create questions, how to choose which methods/solutions, how to acquire resources