

For Use by Participants in CAT Discipline Analog Workshops
(Not for General Disclosure)

A Subset of Skills Assessed by the CAT Instrument

| Skill Set 2 | | |
|--------------------|------------------|---|
| Question | Questions | Descriptions |
| Question 1 | Q10, Q11 | Separate relevant from irrelevant information when searching for information to solve a real-world problem. |
| Question 2 | Q14 | Identify and explain the best solution for a real-world problem using relevant information. |
| Question 3 | Q15 | Explain how changes to a real-world problem situation might alter the recommended solution. |

Anticipate correct and incorrect student responses.

Example Rubric for Selecting Information

Define Problem Solving Goal: _____

| Pre Search Rubric | | | Post Search Observations | | | |
|----------------------------|-------------|------------|--------------------------------|--------------------------|-------------|------------|
| Type of Information Needed | Best Source | Why useful | Is this information available? | Other Information Needed | Best Source | Why Useful |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Example Rubric for Evaluating Information Selection Rubric with possible point values

1. The goal has been clearly stated.

| | | |
|----------------------|--------------------------|-----------------------|
| 0 – Not Clear | 1- Somewhat Clear | 2 - Very Clear |
|----------------------|--------------------------|-----------------------|

2. The list of information identified as being needed is complete.

| Type of Information | Points awarded |
|---------------------|----------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| Total = | |

3. The sources for information are clearly identified.

| | | | |
|-------------------|----------------------|-----------------------------|-------------------------|
| 0 – Seldom | 1 - Sometimes | 2 – Much of the time | 3 – In all cases |
|-------------------|----------------------|-----------------------------|-------------------------|

4. The availability of information from the sources has been verified.

| | | | |
|-------------------|----------------------|-----------------------------|------------------------|
| 0 – Seldom | 1 - Sometimes | 2 – Much of the time | 3– In all cases |
|-------------------|----------------------|-----------------------------|------------------------|

5. The usefulness of each type of information is clearly explained.

| | | | |
|-------------------|----------------------|-----------------------------|-------------------------|
| 0 – Seldom | 1 - Sometimes | 2 – Much of the time | 3 – In all cases |
|-------------------|----------------------|-----------------------------|-------------------------|

Example Rubric for Evaluating Problem Solution

Using the anticipated student responses as a guide, provide sample responses and scoring guidelines for the rubric below.

Step 1 Evaluate Recommendation/Solution

| Best Solution | Acceptable Solution | Not Acceptable Solution |
|---------------------------------------|-------------------------------------|-------------------------------------|
| Ex: | Ex: | Ex: |
| +2 pts. Go to Step 2 | +1 pt. (Stop here) | 0 pts. (Stop here) |



Step 2 Evaluate Reasons

| Add 1 pt. for each appropriate reason given |
|---|
| Add 1 pt. |
| <i>Ex:</i> |
| Add 1 pt. |
| <i>Ex:</i> |
| Add 1 pt. |
| <i>Ex:</i> |

Example Rubric for Evaluating Impact of Changes to Problem Constraints on Solution

Each type of change must satisfy Both Criterion 1 and 2

Criterion 1

Does the information described change the nature of the problem in a significant way?

| Yes | No |
|------------|---|
| <i>Ex:</i> | 0 pts. <i>Ex:</i> |
| <i>Ex:</i> | <i>Ex:</i> |
| <i>Ex:</i> | <i>Ex:</i> |
| <i>Ex:</i> | (Stop here) <i>(Check other alternatives)</i> |

Go to Criterion 2

Criterion 2

Does the information describe how the recommendation will change?

| Yes | No |
|---------------------------------|---|
| 1 pt. <i>Ex:</i> | 0 pts. <i>Ex:</i> |
| 1 pt. <i>Ex:</i> | 0 pts. <i>Ex:</i> |
| 1 pt. <i>Ex:</i> | 0 pts. <i>Ex:</i> |
| 1 pt. <i>Ex:</i> | |
| Check other alternatives | (Stop here) <i>(Check other alternatives)</i> |