QUESTION TEMPLATES

TEMPLATE #1   CONTENT KNOWLEDGE
Summary: Content knowledge questions focus on gains in understanding of scientific, social, or political processes. Typically, there are right and wrong answers to content questions. Content questions should closely reflect the curriculum, e.g., what is taught.
Recommended Use: For programs with a large scientific knowledge component and for audiences that are dependent on mastery of the material, such as teacher professional development or citizen science programs. Warning: for audiences for whom knowledge is less important, or programs where teaching is inconsistent, a long series of content knowledge questions can be annoying and unhelpful.

1a. The importance of [some phenomenon] to [some conservation issue] is its effect on: (select one)
a.   [content]
b.   [content]
c.   [content]
d.   I have no idea!

1b. The relationship of [some factor] to [some other factor] produces the following result: (select one)
a.   [content]
b.   [content]
c.   [content]

Tips for Use: Good content questions avoid the "true/false" format which produces weaker data. Be sure to include at least three choices. Provide correct and incorrect responses that are similar in length and complexity. The use of "I have no idea!" choice (d) is up to you but some audiences will appreciate the option. Content questions work well as part of a "pre-post" test. In other words, give the questions to participants at the beginning of the program. Give the same test at the end. On the "post" form, you also may add satisfaction questions about speakers and facilities. The analysis may either group the responses or track progress of individuals.

TEMPLATE #2   **Attitudes and Self-Efficacy**
Summary: When confidence, enthusiasm, appreciation, and positive attitudes are crucial to outcomes, it makes sense to measure attitudes. The concept of self-efficacy includes a sense that the time is right to implement new ideas.
Recommended Use: Awareness and motivational programs, such as films and short burst programming, and orientation to critical issues lend themselves to attitudinal questions. Also programs that seek to motivate individuals to make changes in their lives.

2a. Compared to the start of [the program], my [knowledge/attitude] about [some topic] has changed in the following way: (select one)
More confused   No change   Increased some   Increased a lot

2b. Compared to the start of [the program], my confidence in implementing [some activity] [in some context or situation] has changed in the following way. (select one)
Less confident   No change   Increased some   Increased a lot

Tips for Use: The form of these questions is *retrospective post*. This means that the questions would be asked of participants only at the end of the event when they are able to judge their own progress more accurately. It is important to include a negative pole (i.e., less confident) or the question will force positive ratings. This format is considered a self-rating and is not as valid for some types of training as for others.

TEMPLATE #3   SELF RATED BEHAVIORAL PROGRESS
Summary: Questions measure an individual's self-assessment of progress or lack of progress.
Recommended Uses: Teacher professional development programs that feature new curricula, or citizen science or youth programs that teach a new skill that the program hopes will be used in non-supervised contexts.

3. Compared to the start of [the program], rate your confidence in [completing some activity] [in some context or situation]. (select one)
Less confident   No change   Increased some   Increased a lot

Tips for Use: The form of these questions is *retrospective post*. This means that the questions would be asked of participants only at the end of the event when they are more likely to be able to judge their own progress.

It is important to include a negative pole (on the left—less confident) or the question is considered to force overly positive ratings. This format is considered a self-rating and is not as valid for some types of training as for others

TEMPLATE #4   BOUNDED BEHAVIORAL OUTCOMES

Summary: Bounded behavioral questions also elicit self-reported data, but the specificity of the questions produce high quality data.

Recommended Uses: For all programs that anticipate change in activity, including utilization of curriculum by teachers, or conservation behaviors by youth or adults.

4. How many times in the past [#days, #weeks, #months] have you [taken a program action]?

None   X-X   Y-Y   Z-Z   More than W

Tips for use: This type of question works well as part of a "pre-post" test. In other words, give the question at the beginning of the program. Then give the same test at the end. On the "post" form, you also may add satisfaction questions about speakers and facilities. This question also lends itself to outcomes evaluations that tracks increase or persistence of desirable behaviors over time and can be administered by phone or mail. However, be sure to keep the "program action" simple. In other words, **don't say,** *"How many times . . . have you brought cans to be recycled, tested your drinking water, and volunteered at a conservation event?"* Instead, ask a **separate question** about each item.

"Based on Grudens-Schuck, N., Eells, J. C., Ceretti, M., & Boddy, P. (2004, December). *Evaluation of environmental and conservation education projects. Final Report to the REAP-CEP Board.* Nevada, IA: Prairie Rivers of Iowa RCD.