

Points for Consideration

Retrospective Pre-test Post-test

Overview:

Documenting change in participant behavior can be achieved by a variety of methods and has become more important to educators in a realm where accountability has become increasingly important. The research method traditionally used in social sciences has been the pretest posttest design of testing knowledge. Participants' skills/ behavior/attitudes/knowledge are measured at the start of a program and then tested again after completion of the program.

Recently the retrospective pre-test post-test (also called post then pre-test and retrospective pre-test) has gained popularity in fields where educators use self-assessment as a tool to measure specific program objectives. Participants answer questions or rate their skills/ behavior/attitude/ knowledge AFTER participation in the program. They are then asked to think back BEFORE they participated in the program and rate themselves on the same items using this "before the program" time frame reference.

Tips:

- 1) Formulate questions on a retrospective pretest post-test to aid participants in the recall process (i.e. ask about specific behaviors instead of general concepts).
- 2) Give participants a specific time frame to which they refer in order to aid the recall process, such as "BEFORE you began this program".
- 3) If resources are available, combine this method with the traditional pretest posttest design and compare outcomes.

Advantages:

- 1) Fast, easy, convenient, and possibly more accurate method of assessing changes in self-reported knowledge and skills.
- 2) Eliminates response shift bias (a change in the participant's frame of reference).
- 3) Decreases likelihood of underestimation of program effects.
- 4) Administered at a single time requiring less complicated data management and eliminating matching pre/post scores.
- 5) Allows some flexibility in questions, being able to insert questions that may not have been thought of at the start of a program due to change in program content or some other event.

Limitations:

- 1) Memory-related problems can influence participants' recall process.
- 2) Participants may have individual motivation to make a program look good and therefor artificially inflate program effects.
- 3) Recall accuracy may cause problems.
- 4) As with any program where significant time passes, change may have occurred due to factors other than program participation such as: maturation, intervening events, regression to the mean etc.

References and Related Resources to Explore:

Pratt, C.C., McGuigan, W.M., Katzev, A.R. (2000). Measuring program outcomes: Using retrospective pretest methodology. *American Journal of Evaluation*. 21(3).

Rockwell, S.K. and Kohn, H. (Summer 1989). Post-then-pre evaluation. *Journal of Extension* [On-line]. 27(2). Available at: <http://www.joe.org/joe/1989summer/a5.html>

Deborah K. Lewis
Leader, Program Development and Evaluation
Ohio State University Extension
lewis.205@osu.edu
Updated October 2016