



DISTRICT 11 NEW AGENT NEWSLETTER

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Evaluation: a critical component of Program Development

In today's climate of increased accountability, Extension professionals at every level are faced with the continued challenge of providing our elected officials with information that quantifies that their investment in Extension programs are providing positive measurable outcomes. Extension can no longer only report to our funding partners the number of participants involved in programs, the number of programs conducted, educational materials developed, or the number of office visits. While all these performance measures remain important, Extension must also document specific outcomes and compare them to financial investments in Extension programs. This point is emphasized in John Campbell's book, *Reclaiming a Lost Heritage*, where he states "taxpayers deserve to know that their money is being prudently expended in society's best interest."

Evaluations of Extension programs are a critical component of the program development process which are utilized to determine if programs are relevant, determine the value of these programs to clientele, how future programs can be refocused or redirected and are the fundamental basis for program interpretation. Seevers, Graham, Gamon, and Conklin (1997) defined evaluation as "... the systematic process of determining the worth of a person, product, or program. Determining the worth of Extension programs is a continuous process that is essential at all three stages of Extension's educational program efforts: planning, design and implementation, and evaluation."

Extension educators utilize the Texas Cooperative Extension model that focuses on multilevel evaluation strategy as adopted by Kirkpatrick evaluation model (1994). The multi-levels are represented below:

Level 1- Customer Satisfaction

Level 2- Clientele Learning

Level 3- Clientele Behavior Change

Level 4- Programmatic Impact

Customer satisfaction measures how participants in specific programs react to the material provided in terms of how well it meets their educational expectations. Clientele learning at level 2 measures the extent participants improve knowledge and/or increase skills as a result of their participation in Extension educational programs. Clientele behavior change measured at level 3 enables Extension educators to determine the extent of change in behavior as a result of participation in Extension programs. Programmatic impact measured at level 4 enables Extension educators to determine the final results that occurred because of participation in educational programs. Programmatic impact at level 4 includes increased production, improved quality, decreased costs, reduced and/or severity of disease, or higher profits. Many of the programmatic impacts measured at level 4 can be measured and reported in economic terms.

This model provides a sequence of methods to evaluate programs. Each level is critical and has impact on the next level. As Extension educators move from one level to the next, the evaluation process becomes more difficult and time-consuming, but the information provided by that level of evaluation becomes more valuable.

An example of how this model has been utilized is that in 2005, sixty programs in District 11 were formally evaluated and summarized. A meta-evaluation (Scriven, 1991) of these evaluation summaries indicated that 100% of these evaluations measured some level of customer satisfaction, 53% measured change in knowledge, 32% measured adoption of technology or behavioral changes, and 10% measured some element of economic impact as a result of Extension programs.

Post-Then- Pre Retrospective Evaluation

In Extension, a standard method to determine behavior change is a pretest-posttest design. This pretest-post-test design may be an inaccurate assessment of instructional impact, in certain types of self-reported program evaluations, because participants may have limited knowledge at the beginning of a program that prevents clientele from accurately assessing baseline behaviors. Before the conclusion of the educational program, the clienteles' new understanding of the program content could have an impact on the responses on their self-assessment. If a pretest was used when the program was initiated, participants have no way to correct an answer at the end of the program if they made an inaccurate assessment in the baseline data. The post-then-pre design corrects this problem and has become a very popular method in evaluating Extension educational programs. This method enables Extension educators to handle this problem by not

administering a pre-test at the beginning of the program. At the conclusion of the program, clientele are asked to answer two questions. The first question asks about behavior because of the program. This is the post-test question. Then the clientele is asked to report what the behavior had been before the initiation of the program. The second question is in actuality the pre-test question, but it is asked after the program when clientele have sufficient knowledge to answer the question validly.

This evaluation method has become an extremely common method of evaluating Extension educational programs. However, it is important for Extension educators to recognize that this method has distinct strengths and weaknesses. These strengths and weaknesses are important to assess before selecting this method. Listed below are strengths and weaknesses of the Post-Then- Pre Retrospective Evaluation:

Strengths	Weaknesses
▶ Less likely to offend clientele who do not like being put in the role of students or research subjects required to complete both pre-tests and post-tests	▶ May introduce a desire for clientele to exhibit a learning effect
▶ Can be used when traditional pre-tests are not possible	▶ Challenges traditional methodological logic, since both predata and postdata are collected after educational intervention
▶ Unlike traditional pre-tests, does not risk negatively impacting intervention effectiveness by possibly introducing terms and concepts before clientele are ready for them.	▶ May introduce threat to validity such as memory recall, history, and regression to the mean.
▶ Provides data that, with other supporting data, can be used to evaluate the effectiveness of a educational intervention	▶ Possibility of fabricated and biased responses
	▶ Can be perceived as less rigorous, and therefore less convincing, than other evaluation approaches

References:

- Campbell, J.R. (1995). *Reclaiming a Lost Heritage*. Ames, Iowa: Iowa State University Press.
- Kirkpatrick, Donald, (1994). *Evaluating Training Programs*. San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Scriven, M. (1991). *Evaluation thesaurus* (4th ed.). Newbury Park, CA:Sage.
- Seevers, B., Graham, D., Gamon, J., & Conklin, N.(1997). *Education through Cooperative Extension*. Albany, NY. Delmar Publishers.

Recommended Reading:

Please read and review the following websites and Journal Articles:

<http://www.joe.org/joe/1999august/iw2.html>

http://s142412519.onlinehome.us/uw/pdfs/G3658_1.PDF

<http://www.joe.org/joe/1995october/a4.html>

<http://danr.ucop.edu/eee-aea/Evaluation%20Attitudes,%20AEA%20Paper.htm>

<http://www.joe.org/joe/1989summer/a5.html>

<http://www.joe.org/joe/1998june/rb5.html>

<http://www.joe.org/joe/2002december/a1.shtml>

<http://www.joe.org/joe/1995april/a4.html>

<http://www.joe.org/joe/2003august/comm1.shtml>

<http://www.joe.org/joe/1990summer/f1.html>

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