

Issue Briefs

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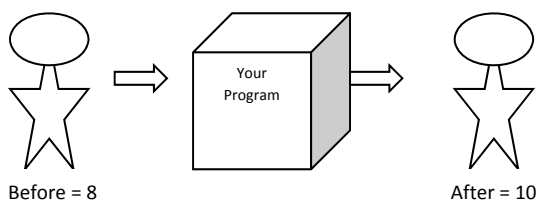
What Works? Understanding Assessment Strategies for Financial Education

Measuring Success

A key question of any education program is, fundamentally did the program 'work?' But what does it mean for an education program to work? Does it mean participants were satisfied or happy? Does it mean they gained knowledge? Does it mean they are more confident in the material or have changed attitudes towards a topic? Does it mean that behavior also changed? These are deceptively complex questions to grapple with for a community financial educator. This brief is designed to introduce several important issues to consider regarding program assessment.

As simple model based on a traditional education approach: before attending a financial education class, participants have some existing knowledge about core financial topics. After completing a financial education program, they have improved their knowledge, which may in turn increase their financial capacity and capability. Figure 1 provides one potential model: the learner moves from a score of 8 (out of 10) on a factual knowledge test to 10 (out of 10) after attending a session.

Figure 1:



Often all we can reasonably measure is shifts in knowledge and then we imply the resulting changes in behavior. But it is also possible to measure participants' financial attitudes and even behavior in some cases.

Behavioral Theory

The literature on financial education lacks a prevailing theoretical framework. Evaluations range from studies motivated by simple descriptive observations about behavioral 'mistakes' to studies based on formal models of behavior change. In general, theories of behavior change in the financial education field are derived from the health literature, beginning with Fishbein and Ajzen's Theory of Reasoned Action (1975) and Ajzen's Theory of Planned Behavior (1991). Another model used in the financial education literature is Prochaska and colleagues (1992) five-stage Transtheoretical Model. These approaches all emphasize that behavior change results from a combination of attitudes, social norms, and intentions.

Causality & Terminology

Considering Figure 1, it might be tempting to say that the program *caused* the movement in scores from an 8 to 10, suggesting 'but for' the program the participant would still be at an 8. However, proving that the program was the cause of the change in score is very difficult to do. So many factors can intervene that the 'but for' argument is often impossible to prove in the absence of careful

statistical controls, or even better, random assignment.

In social science research the term **evaluation** implies causal analysis - that is that the outcomes achieved by participants are relative to some "control" or a counterfactual comparison group. In practice evaluations are expensive, time consuming, and often result in non-findings (null results). As a result true evaluations are rarely used in applied field research outside of specialized programs or pilots. A significant challenge for education programs is selection bias (Stephan Meier and Charles Sprenger, 2007). It appears that unobserved factors may drive people to participate in financial education. Without careful evaluation designs, patience and motivation are responsible for the positive effects associated with financial education, rather than program content.

The term **assessment** is a more accurate description of what financial educators typically can pursue. Assessment focuses on documenting the outcomes achieved by participants, but does not try and prove that the program caused the outcomes. Assessment strategies typically attempt to measure some baseline level and then measure the progress of participants during and after the program. In some cases a non-randomized control group can be used to strengthen the argument that the outcomes measured are *associated* with the program, but not go so far as to claim causality.¹

Domains of Outcomes

The first step in the assessment of a financial education program is selecting what to measure. This might include:

- factual knowledge
- perceived knowledge

- attitudes
- self-reported behaviors, or
- actual behaviors

There are several guiding questions to consider when selecting domains of outcomes: (1) can the item be reliably measured for most participants in the program? (2) is the item to be measured a plausibly related to the information or education provided? (3) is the item measured relevant for participants to be more financially capable? Assessments should not attempt to measure every domain, and in fact it is best to design an assessment to explore a few items which proxy for the general condition of participants.

Not all items can be consistently measured or are easily collected.

One problem in financial literacy research is determining how to accurately measure financial knowledge. Many studies rely on self-reported knowledge scales ("how confident are in your knowledge of... "). At least one study indicates that people tend to overestimate their financial knowledge relative to what they actually know. Based on a comparison of self-reported financial knowledge and scores on an objective test of investment knowledge, Agnew and Szykman (2005) found low correlations, especially for people without a college education. Self-reported knowledge may yield ambiguous results.

Methodology

Implementing an assessment requires a careful plan:

- How will data be collected? Will it be self-reported or administrative data?
- Will you use paper or online instruments?
- Will the data contain personal information? Will you need human

¹ Often the term 'impact' is reserved for causal analysis and 'outcomes' for descriptive assessments.

subjects (IRB) approval? Who will obtain consent (if required)?

- When will participants complete consent (if required) and any baseline or follow up surveys? How will non-consent or non-response affect your sample?
- How soon/often will assessments take place? Is that enough time to measure effects? How will longer time frames result in more/less responses?

One advantage of online surveys and administrative data is that there is no need for subsequent data entry. Otherwise it is fairly easy to manually enter the results into an Excel spreadsheet for analysis.

Many programs conduct surveys at the start and end of the education program and then compare the two results for each client. This is most appropriate for measuring factual knowledge or perceptions. The advantage of conducting assessment during the final training session is that you are likely to receive responses from nearly all participants. The disadvantage is that your clients have little time to adjust their financial behavior/situation in response to your program. You may also end up 'teaching to the test' and focusing on materials you know participants will be asked about. Conducting follow-up assessments at a later date provides more time for participants to act on the information learned during the training, but carries the risk that participants will not respond to the survey.

No survey will obtain 100% response rates. However, you should consider the extent of non-response when choosing how to administer the assessment instrument. Take time to consider who is likely to respond. Will it be the most motivated and successful clients? How might this affect your results? One way to boost response rates is to offer incentives – either a small monetary reward (even a dollar

bill improves mail survey responses) or a raffle. It is important to always record and monitor response rates. Whenever response rates are less than 50% the results of an assessment are more likely to be compromised. Other ways to increase responses include:

- Use forms and surveys that are clean, easy to follow and have lots of white space.
- All written and oral instructions should be easy to comprehend.
- The format should be easy to complete.
- Avoid forms/surveys that take more than 5 minutes to complete – generally 25 questions or 2 pages maximum.
- Put socially sensitive questions at the end.
- When mailing forms/surveys use a stamp and personalized letter.
- Follow up 3 or more times with non-responders.

Analysis

Data should be recorded electronically. Most online survey tools will export data into software such as Excel. Make sure you are able to link participants over time with an identifier if a multi-wave design is used. Delete any personal information that is not needed before conducting any analysis.

Analyze how participant outcomes compare over time, or analyze 1 period cross sectional data. Generally a mean (average) is all that is required. To examine participant's improvement on an individual measure, calculate the average score for participants on the before survey and compare it with the average score on the after survey. If means are compared, use the variance (or standard deviation) and the number of participants to conduct a t-test at a statistical level such as the 5% level (or a 95% confidence interval—that is

only 1 in 20 means would not overlap if in fact the means were truly different). For more info: http://www.socialresearchmethods.net/kb/stat_t.php

Communication

Ultimately assessments are designed to help you show the value of your educational program to your stakeholders, as well as to improve the financial program. The results may also allow you to assess the needs or outcomes of categories of participants. The results can document the outcomes of your financial training for funders. Results might also be useful for strategic plans and press releases. Simple graphs and tables can be helpful. The text related to the write up can be relatively short in length - less than 10 pages total including all figures and sample survey questions. Often highlighting a specific participant as an anecdote or photo helps to connect readers to the context of the program. Of course it is important to be careful in language used when communicating results. Over-stating the case and claiming the program caused an impact can undermine your credibility.

Conclusion

Not every program needs an extensive assessment, but even a simple measure of the outcomes associated with an education program can be helpful in justifying an educational strategy. With careful planning and a coordinated communication effort the time and energy put into an assessment plan are likely to pay off over the long run.

Resources

– NEFE evaluation toolkit and manual
<http://www.nefe.org/eval/>

Wisconsin Extension
<http://www.uwex.edu/ces/pdande/evaluation/index.html>

Cornell Extension
<http://staff.cce.cornell.edu/administration/program/evaluation/evalrefs.html>

Penn State Extension
<http://extension.psu.edu/evaluation/>

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The University of Wisconsin-Extension (UWEX) Cooperative Extension's mission extends the knowledge and resources of the University of Wisconsin to people where they live and work. Issue Briefs are an ongoing series of the Family Financial Education Team. This brief was drafted by J. Michael Collins, Assistant Professor in Consumer Finance and Extension State Specialist.