

**NEFE Financial Education Evaluation Manual**



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- **Dr. Tiffany Berry**, Associate Director, Claremont Evaluation Center (CEC) & Research Associate Professor, Claremont Graduate University (CGU), Claremont, California
- **Dr. Michelle Sloper**, Senior Evaluation Fellow, Claremont Evaluation Center (CEC), Claremont, California

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## NEFE Financial Education Evaluation Manual

### INTRODUCTION

Financial education plays an important role in guiding individuals to achieve their financial goals and contribute to the economic well-being of society as a whole. Without financial knowledge, consumers can have difficulty making decisions in today's complicated marketplace. There is a critical need to educate people in basic financial issues so they may make wiser consumer decisions.

Many people fail to recognize the important role that financial education plays in the United States economy. Research shows that the impacts and results of financial education programs are not sufficiently evaluated. If such results were more widely tracked and disseminated, successful programs would be taught more frequently and less successful programs either would be improved or discontinued. The National Endowment for Financial Education® (NEFE®) developed this evaluation manual, an essential component of the NEFE Financial Education Evaluation Toolkit®, to address this deficiency.

The NEFE Financial Education Evaluation Manual helps financial educators understand the purpose and goals of evaluation, and provides a basic overview of the evaluation process. This information is designed for educational program managers, educators and decision-makers who are implementing financial education programs in traditional school settings or community-based programs/nonprofit organizations.

The principles and practices outlined here provide a general guide for the evaluation of financial education projects, interventions or programs, regardless of the age of the recipients, the curriculum, the context of service delivery, or the timeline of the intervention.

Where possible, this manual provides an overview of these topics from the field of evaluation, as well as providing details specific to the financial education context.

The manual is organized around the following sections:

- **Part I.** Introduction to Evaluation
- **Part II.** Planning: Preparing for the Evaluation of Financial Education Projects and Programs
- **Part III.** Implementing: Financial Education Evaluation Design and Data Collection
- **Part IV.** Utilizing: Evaluation Data Use and Continuous Quality Improvement



Each of the four sections begins with a short summary of the content for the section, and is organized around driving questions. Additionally, NEFE offers a number of websites to help financial educators, including the NEFE Financial Education Evaluation Toolkit® ([toolkit.nefe.org](http://toolkit.nefe.org)). Visit [www.nefe.org](http://www.nefe.org) for up-to-date information about current research projects and programmatic initiatives. Throughout the evaluation manual, additional resources are identified for educators seeking more information on specific topics (in the text, as well as in Appendix D, Evaluation Resources). Additionally, Appendix A provides a glossary of evaluation terms discussed in this manual for reference.

## Part I. INTRODUCTION TO EVALUATION

This section defines evaluation and explains why financial education programs or interventions should be evaluated.

### Part I Section Summary

Primary Sections	Section Summary
<b>Why conduct an evaluation?</b>	Evaluation can provide a number of benefits, including informing decision making, establishing shared goals, measuring performance, identifying best practices and challenges, and program improvement, with the ultimate goal of benefiting the recipient of the financial education services.
<b>What is evaluation in financial education?</b>	Financial education program evaluation is a systematic assessment of the implementation of a financial education intervention and compares learner achievements in financial education with the program goals and objectives to determine the success or failure of the educational program.

### Why conduct an evaluation?

A financial education program without evaluation is similar to an explorer without a compass. Without a compass, an explorer is not able to decide whether he or she is on the right track. Without an evaluation, the educator is not able to decide whether the financial program is producing successful results and meeting the audience's needs.

Evaluation can provide a number of benefits to the financial educator or the organization with the ultimate goal of benefiting the recipient of the financial education services. There are a number of reasons to conduct evaluation, including:

- Building a shared meaning (both internally and externally) about organizational goals
- Supporting data-driven decision making
- Promoting organizational improvement
- Measuring program performance and goal achievement
- Identifying effective practices in financial education
- Documenting findings for accountability purposes
- Fostering sustainability of the program or intervention
- Generating knowledge about financial education programs

Evaluation data can be used to make decisions about expansion, continuation, reduction or changes to current programs. Evaluation allows educators, administrators and funding agencies to make decisions about the program based on objective data. If an educator does not plan for evaluation at the beginning of the program or before services are provided, some information is lost that may have been useful for recording program outcomes and understanding the contributing factors to those outcomes. As a result, the educator is less able to make accurate decisions about the program, which hinders further improvement.

### What is evaluation in financial education?

Evaluation is defined as “the systematic assessment of the operation and/or outcomes of a program, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the program” (Weiss, 1998). Financial education program evaluation is the process of systematically assessing the implementation of a financial education intervention and comparing learner achievements with program goals and objectives to determine the success or failure of the educational program.

These definitions point to two primary objectives of evaluation:

- (1) exploring the operations or process of a financial education intervention, and
- (2) exploring the learner outcomes or achievements as a result of participation in the intervention.

These two primary objectives, while not mutually exclusive, correspond the two broad types of evaluation: (1) formative evaluation, and (2) summative evaluation.

Formative Evaluation	Summative Evaluation
<p><b>Formative evaluation</b> helps educators decide whether the program is meeting the needs of program recipients, whether the activities implemented are of high quality, and whether any improvements are required. By engaging in formative evaluation, the educator is able to identify whether the desired program activities and processes are being implemented with fidelity and quality. The educator can identify and capitalize on the program's strengths and identify and rectify the program's barriers and weaknesses. A good formative evaluation provides data to support these areas, ultimately helping educators make program improvements.</p>	<p><b>Summative evaluation</b> helps educators document participant outcomes associated with or attributed to financial education programs. Summative evaluation provides data to show whether or not a program is effective in promoting learning about financial education concepts and behavior change, including the actual and perceived benefits associated with services. These findings also can provide data to justify the continuation of the program or to request additional funding by illustrating the relative cost-benefit ratio. Documented program outcomes help funding agencies measure the worth of programs and allocate more funds to stronger educational programs.</p>
<p><b>Example:</b> A formative evaluation of a financial education program might explore the participants needs and components of implementation quality, including:</p> <ul style="list-style-type: none"> <li>• Does the financial education program or curriculum address participant needs?</li> <li>• Is the information presented relevant to the participants?</li> <li>• Are the materials being implemented as intended?</li> <li>• Is the material presented in an engaging manner?</li> <li>• Are there positive relationships between the educator and the participants?</li> <li>• Do participants regularly use financial education services?</li> </ul>	<p><b>Example:</b> A summative evaluation of a financial education program might explore the outcomes associated with participation in the program, and participant experiences, including:</p> <ul style="list-style-type: none"> <li>• Do participants demonstrate improvements in intended outcomes after participating in the services?</li> <li>• Is there a significant change in participants' outcomes before and after participation?</li> <li>• Do participants demonstrate better outcomes than nonparticipants?</li> <li>• Are participants satisfied with the services provided?</li> <li>• Do participants believe the services benefitted them?</li> <li>• Do participants experience long-term benefits?</li> </ul>

It is not uncommon for an evaluation to encompass both formative and summative priorities. This is particularly true for summative evaluation because it is important to examine the consistency and quality of implementation (features of a formative evaluation) when exploring participant outcomes. How the intervention was delivered will impact whether, or how much, the participants benefit from the intervention. In this way, information about how the intervention was implemented and delivered can help explain (or even be used to statistically predict) changes in participant outcomes and impact in summative evaluation processes.

## Part II. PLANNING: PREPARING FOR THE EVALUATION OF FINANCIAL EDUCATION PROJECTS AND PROGRAMS

Evaluation is an integral part of the educational programming process. To make evaluation useful in program improvement, the evaluation plan should be drawn at the beginning of the program instead of waiting until the end. Evaluation still can be conducted after the program has started, but doing so limits the type of information gathered. It is best to plan the evaluation as early as possible.

### Part II Section Summary

Primary Sections	Section Summary
<b>Who should conduct the evaluation?</b>	Based on their own capacity to conduct the evaluation, educators can choose to conduct evaluations on their own or to hire an outside evaluation expert. Educators can build an evaluation team by including individuals who share an investment or interest in the findings.
<b>What is our program or project trying to do?</b>	Before conducting the evaluation, it is useful to identify the theory behind why and how the program will produce the intended outcomes. The logical prediction of how a program's activities and resources are intended to lead to specific outcomes is called a logic model (sometimes referred to as a theory of change).
<b>What outcomes should be included in our logic model or explored in our evaluation?</b>	Assuming that examining programmatic outcomes are an evaluation priority, the outcomes included in the logic model should be the same outcomes examined in the evaluation. When selecting the most relevant and appropriate outcomes for the logic model, it is important to consider which outcomes are feasible given the intervention, when particular types of outcomes typically appear, and the age of the participants. The planned outcomes should be measurable and reasonably achievable with the available resources within the specified time period.
<b>What questions do we want to answer?</b>	Evaluation questions provide the foundation upon which the evaluation is built. These questions should articulate the issues and concerns of the educator and other program stakeholders, as well as addressing the presence and quality of the logic model.

### Who should conduct the evaluation?

To face the challenges in collecting data, the educator must develop evaluation capacity, including an understanding of evaluation concepts and the ability to meaningfully engage in an evaluation of financial education programs. Building evaluation capacity is essential for planning and implementing data collection processes practically, meaningfully and accurately. This manual is intended to promote evaluation capacity for those who are conducting evaluations on their own projects, interventions or programs.

There are some instances when an educator or program might benefit from external evaluation assistance, such as hiring an evaluation professional to assist with or conduct the evaluation. An external evaluator can be useful when an educator does not possess sufficient capacity, knowledge or resources to conduct the necessary evaluation. The evaluation team should be established prior to conducting the evaluation to ensure their participation in the planning process. Although hiring an external evaluator

may be more expensive than conducting an evaluation on your own, some circumstances might warrant external evaluation assistance, including:

- The educator lacks knowledge about sophisticated evaluation designs.
- The educator lacks knowledge about statistical analyses.
- The educator has limited time or organizational resources.
- Funding/accountability organizations require the evaluation to be conducted by an external entity.
- The educator lacks the ability to be objective (reduce bias) during the evaluation process.

The American Evaluation Association (AEA) website is a good place to find an evaluator in your state ([www.eval.org](http://www.eval.org); select “Find an Evaluator” on their homepage). Local colleges or universities may employ practicing evaluators in departments such as psychology, economics, education, administration or sociology. When hiring an evaluation partner, it is useful to consider:

- Their approach to evaluation and how it fits with your organizational culture and needs
- Their formal evaluation training and experience with similar programs, projects or designs
- Their proposed budget for conducting the evaluation

Posting a [Request for Proposal](#) (RFP) on appropriate professional networks is one way to solicit proposals from evaluators who would be willing and able to conduct the desired evaluation for you. The RFP outlines the evaluation you would like to conduct and puts a call out to the field request proposals from interested and qualified evaluators. You can post evaluation RFPs on the American Evaluation Association (AEA) website ([www.eval.org](http://www.eval.org); select Career on the homepage). Writing a high-quality RFP is essential for securing a strong evaluator. There are several resources that can be used to create strong RFPs, including the following:

- *Five Steps for Selecting an Evaluator: A Guide for Out-of-School Time Practitioners*, by Bronte-Tinkew, Joyner, & Allen (2007), Child Trends ([www.childtrends.org](http://www.childtrends.org))
- *Public Profit Evaluation RFP Guide*, Public Profit ([www.publicprofit.net](http://www.publicprofit.net))

Once you have decided who will lead the evaluation, it is important to identify the evaluation stakeholders and build the evaluation team. [Evaluation stakeholders](#) are individuals who share an investment or interest in the findings of an evaluation. Stakeholders typically fall into three categories as outlined in the table below.

Types of Stakeholders	Those involved in program operations	Those served or affected by the program	Intended users of the evaluation findings
<b>Examples</b>	<ul style="list-style-type: none"> <li>• Instructors</li> <li>• Program staff</li> <li>• Volunteers</li> <li>• Program leadership</li> </ul>	<ul style="list-style-type: none"> <li>• Students</li> <li>• Recipients</li> <li>• Families</li> </ul>	<ul style="list-style-type: none"> <li>• Funders</li> <li>• School districts</li> <li>• Community organizations</li> <li>• Policy makers</li> </ul>

To the extent possible or feasible, it is useful to involve representatives from these groups in evaluation processes because they will be interested in or directly impacted by the evaluation findings. Incorporating the stakeholders’ voices and their data needs early in the planning process will enhance the evaluation’s relevance upon completion. Additionally, the inclusion of unique and diverse



perspectives, expertise and experiences will enhance the evaluation process and the ability to interpret findings.

### What is our program or project trying to do?

#### *Creating a Logic Model*

Before conducting the evaluation, it is useful to identify the theory behind why the program should produce the intended outcomes. The logic prediction about how the program's activities and resources are intended to lead to the organization's outcomes and impact is called a logic model (sometimes referred to as a theory of change). A logic model usually is a visual representation of the relationships between the resources invested, the activities that take place, and the benefits or changes that result. The logic model depicts the programming process in graphical form to help clarify what activities should be implemented to promote the financial education outcomes as intended. The following section discusses the application of the logic model in the financial education programming process.

As depicted in the table below, logic models traditionally have several components. At the start of the model are the resources, or inputs, needed for effective implementation of the financial education program. If the logic model is sound and the necessary resources are available, then financial educators should be able to develop and deliver educational programs in the intended way. These resources are linked to the primary activities that make up the intervention itself. Then, if planned activities are delivered, outputs are used to count the direct and immediate results of implementation. If the output is created, then there is a great potential to benefit the target participants. The benefits derived by the target participants from the program or intervention are called outcomes. It is essential that the logic model depicts the relationships between the activities implemented and the outcomes of interest because this helps to determine which components of the program or activities are intended to lead to which specific participant outcomes. Appendix B provides a simple template worksheet for starting the logic model process. It is important to remember that logic models are changeable, meaning that they can be revised or edited with additions or changes to the program or intervention. The logic model is never set in stone, but rather should be revised along with the program or intervention, and as a result of evaluation findings.

#### Logic Model Components and Financial Education Examples

	Inputs	Activities	Outputs	Outcomes
<b>Definition</b>	Resources necessary to put toward goals and support activities	Actions/tasks by the program and its staff, services provided	Direct, tangible products of activities or services	Changes in participants that result from program activities, expressed as short-term, intermediate, long-term
<b>Examples</b>	<ul style="list-style-type: none"> <li>▪ Curriculum</li> <li>▪ Classrooms</li> <li>▪ Funding</li> <li>▪ Instructors</li> <li>▪ Partnerships</li> </ul>	<ul style="list-style-type: none"> <li>▪ Financial education classes/lessons</li> <li>▪ Financial education activities</li> <li>▪ Mentoring</li> <li>▪ Projects</li> </ul>	<ul style="list-style-type: none"> <li>▪ Educational materials development</li> <li>▪ Modules covered</li> <li>▪ Classes held</li> <li>▪ Participants reached</li> <li>▪ Hours of services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Attitudes</li> <li>▪ Behaviors</li> <li>▪ Knowledge</li> <li>▪ Skills</li> <li>▪ Performance</li> </ul>

Logic models inform the evaluation process by providing guidance about appropriate outcomes, outputs, and indicators of high-quality activities. In addition, the logic model is useful when interpreting

evaluation findings, particularly negative findings.

If the program or intervention is not successful, the logic model can provide some explanation for why the program did not work by helping to determine which activities were not implemented with sufficient quality or duration, or which resources were inadequate. Logic models also are useful for planning and designing financial education programs to achieve desired impacts. By creating a visual model of the intended program, the educator identifies which activities are most integral to producing outcomes and which resources are necessary for implementing high-quality activities.

Creating a logic model, particularly in conjunction with the evaluation team or in collaboration with project stakeholders, can clarify the core reasons and ingredients for producing program impact, and create a shared understanding of the program's goals and strategies. The University of Wisconsin Cooperative Extension) has several useful logic model resources, including an online course about logic model construction (<http://www1.uwex.edu/ces/lmcourse>). See Appendix D for more information and tools.

### **What outcomes should be included in our logic model or explored in our evaluation?**

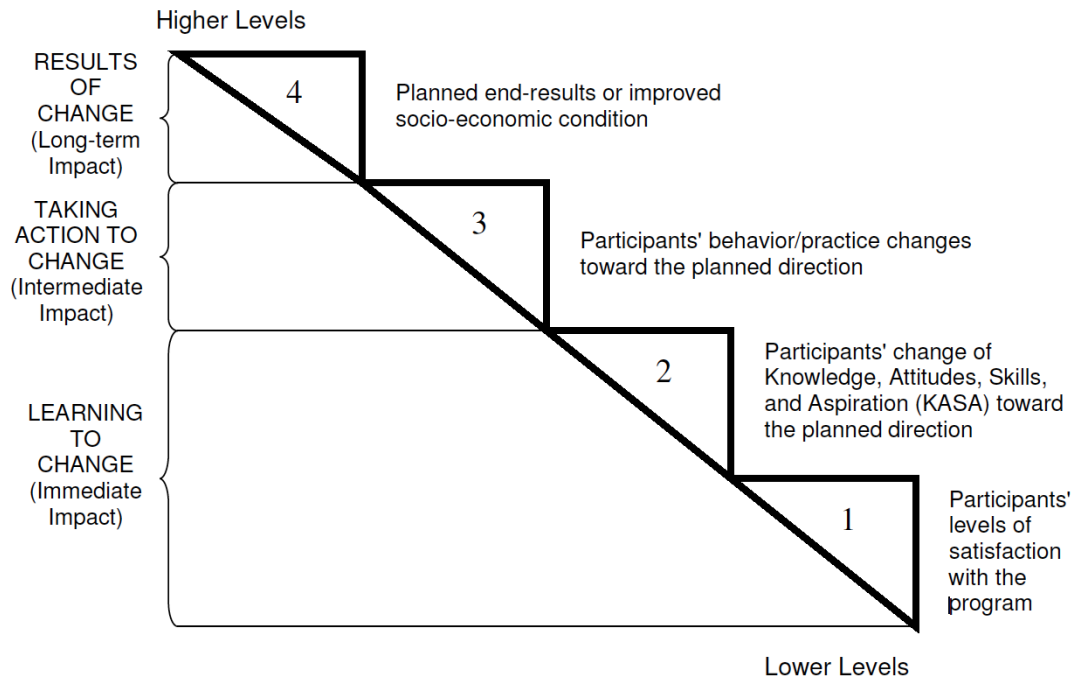
The outcomes identified in the logic model should be measurable and reasonably achievable with the available resources within the specified time period. The more specific the outcome — in terms of the participant and the intended change, the processes of program development, and the content delivery methods — the clearer evaluation and monitoring becomes. If the intended change is specific, the educator can focus educational activities and evaluation to facilitate and document that specific outcome. Lastly, evaluation outcomes should be strongly aligned with the content of the financial education program.

When selecting the most relevant and appropriate outcomes for the logic model, it's useful to consider what is feasible given the intervention and when particular types of outcomes typically can be expected and observed.

The Financial Education Outcomes Hierarchy below can be used to understand the program outcome process. Immediate or short-term outcomes include changes in participants' knowledge, attitudes and aspirations that can be measured soon after completion of the program.

Intermediate outcomes include changes in participants' financial behavior, such as the adoption of appropriate financial management practices. Normally, intermediate outcomes take one to six months to manifest. Long-term outcomes are improved economic conditions, such as paying down debt and buying a house. Generally, long-term outcomes take more than six months to manifest.

## Financial Education Outcomes Hierarchy



The first measurable outcome of a program is how satisfied participants are with their experience. Depending on participants' interaction with the program, the quality of the program, and how well it met their needs, participants may be satisfied, indifferent or dissatisfied.

If participants are satisfied with the program, then there is potential to elevate to the next level of outcomes: learning. Learning includes changing participants' knowledge, attitudes, skills and intentions to engage in the financial behaviors taught in the program. If the program is effective, these outcomes take place during or immediately after the program ends.

Another strong outcome is determining participants' perceptions of their own readiness to apply the financial behaviors that the educator wants them to practice and adopt at the end of the educational program. Generally, the objectives of financial education programs include guiding participants to adopt desired financial management behaviors or proactive financial practices. If the program is effective, participants will show their readiness to adopt these financial practices by planning to implement them. The potential degree of participants' expected change varies with the educational program, type of participants, and the participants' socioeconomic environment. The participants' behavior change can take place over a period of time. If participants adopt appropriate financial management behaviors, there is a potential for achieving the next level of outcomes.

The lower the level on the outcome hierarchy, the easier it is to document, but the weaker the evidence to justify the educational program. The higher the level on the outcomes hierarchy, the stronger the evidence for the justification of the program, but the more difficult it is to document the results. In planning for the evaluation, the educator needs to balance the strength of the evidence needed to address the evaluation priorities and answer the evaluation questions while also considering what is practical and feasible for data collection.

Below are two sample programs, followed by potential short-term and long-term outcomes relevant to each program.




Example Program	Short-Term Outcomes	Long-Term Outcomes
<b>First-Time Homebuyer Education Program</b>	<ul style="list-style-type: none"> <li>• Knowledge of how to assess affordable housing</li> <li>• Knowledge of how to save money for closing costs</li> <li>• Ability to shop for the lowest mortgage interest rate</li> <li>• Reduced stress and anxiety about home buying process</li> </ul>	<ul style="list-style-type: none"> <li>• Application of knowledge during home-buying process</li> <li>• Purchase of a home within financial means</li> <li>• Successful payment of mortgage over time</li> </ul>
<b>Debt Reduction Education Program</b>	<ul style="list-style-type: none"> <li>• Ability to identify needs and wants separately</li> <li>• Understanding of effective spending habits</li> <li>• Knowledge of personal and household budgeting techniques</li> <li>• Knowledge of credit building strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced debt</li> <li>• Improved debt ratio (debt/assets)</li> <li>• Improved credit score</li> <li>• Frequent use of personal budget techniques to manage debt</li> </ul>

The Consumer Financial Protection Bureau (CFPB; <http://www.consumerfinance.gov/>) has published a *Developmental Model of Youth Financial Capability* to inform the selection of appropriate outcomes for youth participants in financial education programs. The CFPB model suggests that financial education is built via three primary components that are most susceptible to change or growth during particular years of life. This means that the selection of outcomes for a financial education program serving youth and young adults should consider the age of the participants in selecting the program's intended outcomes to be sensitive to the developmental potential of each age group.

The primary developmental goal for financial education programs targeting early childhood (ages 3-5) is the development of executive function (e.g., self-control, working memory and problem solving). In middle childhood (ages 6-12), children have a greater potential to develop healthy financial habits and norms, including frugality, the value of saving and planning ahead, and considering their own values when making spending decisions. In adolescence and young adulthood (ages 13-21), interventions should aim to develop financial knowledge and decision-making skills. For adult learners, the CFPB has resources to support the development of "financial well-being."

To learn more about financial well-being and this developmental model of financial capability, please visit the Consumer Financial Protection Bureau (CFPB) website.

**CFPB Developmental Model of Youth Financial Capability**

	<b>1. Executive function</b> <i>Self-control, working memory, problem solving</i>	<b>2. Financial habits and norms</b> <i>Healthy money habits, norms, rules of thumb</i>	<b>3. Financial knowledge and decision making skills</b> <i>Factual knowledge, research and analysis skills</i>
<b>Early childhood (ages 3-5)</b>		Early values and norms	Basic numeracy
<b>Middle childhood (ages 6-12)</b>	<i>Development continues</i>		Basic money management
<b>Adolescence and young adulthood (ages 13-21)</b>	<i>Development continues</i>	<i>Development continues</i>	

**What questions do we want to answer?**

Evaluation questions provide the foundation upon which the evaluation is built. These questions should outline the issues and concerns of the educator and other program stakeholders, as well as addressing the presence and quality of the logic model. It should be noted that evaluation questions are separate and distinct from survey questions or items. Evaluation questions lay out the priorities of the evaluation and outline the information that is sought during the evaluation in a global sense, whereas survey questions are used to examine changes in participant outcomes and explore their experiences (when these topics are included in the evaluation priorities). The questions below provide an example of this distinction.

<b>Evaluation Question:</b>	<b>Survey Item:</b>
Do participants demonstrate an improvement in their confidence about financial behaviors after participating in financial education services?	I feel more confident about my ability to save money regularly (response options: <i>strongly disagree to strongly agree</i> ).

Evaluation priorities commonly are determined by the program's stage of maturity. This means that new programs or those in early phases of implementation should focus on the early components of the logic model including stakeholder needs, resources and the implementation of key activities. Common evaluation questions for new programs seek to understand if there are enough high-quality resources to provide educational opportunities for the target participants and to determine the quality of activities provided. These types of questions are common in formative evaluations.

Programs that have a longer history of implementation may consider exploring questions related to short- and long-term outcomes and impact — common themes of summative evaluation processes. As evidence is established to support the existence of a strong, consistent and high-quality program or intervention, evidence can be collected to explore more rigorous evaluation questions related to impact,

such as those employing an experimental design (randomized control trial) or quasi-experimental design. Programs or interventions interested in summative impact evaluation should first establish several prerequisites to ensure the success of this type of evaluation, including a sustainable, stable intervention with demonstrated fidelity to intervention models and sufficient exposure or dosage for program participants. These prerequisites can be established via formative evaluation processes.

### Writing Evaluation Questions

Program History	Common Evaluation Questions	Type of Evaluation
New programs or early stages of program	<ul style="list-style-type: none"> <li>▪ What are the critical needs of the program participants?</li> <li>▪ Is the program targeting the appropriate recipients?</li> </ul>	Needs assessment, Formative evaluation
	<ul style="list-style-type: none"> <li>▪ Is the program or intervention being delivered in a consistent manner?</li> <li>▪ Are the program services being implemented in a high-quality manner?</li> </ul>	Formative evaluation
Mature, stable, late-stage programs	<ul style="list-style-type: none"> <li>▪ Are the desired outcomes being obtained?</li> <li>▪ Do participant outcomes improve over time?</li> <li>▪ Do participant outcomes differ across characteristics of the programs or the participants?</li> </ul>	Summative outcome evaluation
	<ul style="list-style-type: none"> <li>▪ After participating in the program, do participants possess greater outcomes than nonparticipants?</li> <li>▪ Did the program cause the desired impact?</li> </ul>	Summative impact evaluation

There are many different types of evaluation questions that can be useful for financial educators. The main goal is to determine what information would be useful for you and your program's stakeholders (e.g., participants, parents, school administrators, funders) and write questions to address these needs. Below are some example evaluation questions that address several components of the logic model and are relevant to financial education programs.

#### Needs Assessment

- What financial education topics are most relevant to the participants?
- In which topic areas are youth lacking essential financial knowledge?
- Which financial education topics are participants most interested in learning?

#### Resources

- Is the financial education curriculum relevant to the participants' characteristics, needs and interests?
- Are there adequate materials for participants and an appropriate space for program implementation?

#### Activities

- Are participants getting sufficient exposure to the program or intervention?
- Are the services offered being implemented as intended and of sufficient quality?

#### Outcomes

- Is the program achieving the goals and objectives it intends to accomplish?
- Does the value or benefit of the program exceed the cost of producing it?
- Can the intended outcomes be linked back to the program, as opposed to other influences?

As mentioned above, formative evaluations commonly examine the needs, resources and activities implemented, and summative evaluations are more focused on outcomes and impact. Again, it can be crucial to include evaluation questions related to the resources, and quality of activities for a summative evaluation because these evaluation questions will lead to data that can be useful in explaining trends in participant outcomes. This is particularly true when outcomes are not as expected or particular groups of participants experience greater changes in outcomes than other participants. Trends in needs, resources and implementation may explain surprising findings.

This section provided instructions on how to prepare for the evaluation by setting up the evaluation team, developing a logic model, and writing the evaluation questions. Proper planning for the evaluation will improve the likelihood of conducting a high-quality evaluation and producing useful information. The following section presents information on how to conduct the evaluation of interest.

### Part III. IMPLEMENTING: FINANCIAL EDUCATION EVALUATION DESIGN AND DATA COLLECTION

After developing a logic model and evaluation questions, the next step is to finalize the evaluation design and data collection.

#### Part III Section Summary

Primary Sections	Section Summary
<b>What type of evaluation should be conducted?</b>	The evaluation questions and priorities should inform the type of evaluation conducted. A good evaluation design addresses the evaluation questions, is appropriate for the evaluation context (e.g., time, resources), and provides sufficient and critical data. Evaluations commonly conducted by financial educators likely will employ descriptive or correlations designs.
<b>What type of data should be collected?</b>	It is most beneficial to collect both qualitative and quantitative data during the evaluation so these data sources can be used in conjunction to develop a clear and accurate answer to the evaluation questions.
<b>Who should be a part of the evaluation study sample?</b>	The educator will need to decide who is available to participate in the evaluation and how many participants are feasible based on the evaluation timeline and budget. Prior to conducting the evaluation, the educator should plan who will provide data for the evaluation, and how to gain access to data for these participants.
<b>What evaluation methods should be employed?</b>	Formative evaluations typically employ observations, attendance analyses and surveys to clarify the presence and quality of early components of the logic model, including adequacy of resources, needs of the target population, fidelity (or conformity to the curriculum/programs as developed), and quality of implementation. Summative evaluations typically focus on participant outcomes, so it is common to employ surveys, tests/assessments, financial indicators, and focus groups or interviews.

The quality of the evaluation design and data collection plan largely determines the quality of the evaluation data gathered. The following factors are important guidelines in designing evaluations and creating data collection systems.

#### What type of evaluation should be conducted?

The evaluation questions and priorities should inform the type of evaluation conducted. In a simplified sense, there are two primary types of evaluation: formative evaluation and summative evaluation.

As the table below demonstrates, if you are using the evaluation to examine the needs of participants, the adequacy of resources, or the quality of implementation to aid learning and program improvement, it is recommended that you conduct a formative evaluation. If you are interested in documenting the benefits of the program to determine the effectiveness and impact, it is recommended that you conduct a summative evaluation process. Evaluations can, and often do, include components of both types of evaluations depending on the evaluation questions and priorities. In fact, it is useful to explore implementation (as common in formative evaluations) when you are interested in program effectiveness (summative evaluation) because information about the quality of services is useful for explaining why a particular project or intervention was successful or not. When evaluations include both



formative and summative priorities, best practices in implementation can be identified to promote participant outcomes most effectively. The table below summarizes these types of evaluations, and the designs that are most commonly employed.

<b>Evaluation Purpose</b>	<b>To aid learning and continuous improvement</b>	<b>To demonstrate effectiveness and impact</b>
<b>Type of Evaluation</b>	<u>Implementation/Formative Evaluation:</u> <ul style="list-style-type: none"> <li>Assess needs of participants</li> <li>Assess adequacy of resources, materials and inputs</li> <li>Identify challenges, issues and barriers to high-quality implementation</li> <li>Understand the quality and fidelity of services provided</li> <li>Document and maximize strengths</li> </ul>	<u>Outcome/Summative Evaluation:</u> <ul style="list-style-type: none"> <li>Understand actual and perceived benefits associated with services</li> <li>Determine the effectiveness, impact of intervention</li> <li>Answer questions about what works and for whom</li> <li>Cost-effectiveness</li> </ul>
<b>Program Types</b>	Appropriate for projects in early implementation stages and throughout the project lifespan	Appropriate for mature programs or those later in implementation stages
<b>Evaluation Foci</b>	Focused on resources, activities and outputs	Focused on outcomes (short-term, intermediate and/or long-term) and impact
<b>Evaluation Design</b>	Descriptive Correlational	Experimental Quasi-Experimental
<b>Data Collection Methods</b>	Needs assessment Observations Focus groups/interviews Surveys Document review Dosage/attendance	Surveys Tests or assessments Focus groups/interviews
<b>Who should we collect data from?</b>	Program participants Program staff/instructors	Program participants and a comparison or control group of nonparticipants

A good evaluation design addresses the evaluation questions, is appropriate for the evaluation context (e.g., time, resources), and provides sufficient and critical data. The table above provides a brief summary of the designs and the common methods that are typically involved in formative and summative evaluation. This list of methods and designs is not exhaustive, but provides a starting place to select the appropriate design and methods aligned with the evaluation questions and priorities. As with the other decisions made during the evaluation, the educator should consider several factors before selecting the data collection methods, including resources available, potential data sources that are already available or being collected, practicality, feasibility (particularly given the expertise of the evaluation team), and funding.

As the table below demonstrates, there are three primary evaluation designs that are suited for distinct evaluation goals and contexts. Evaluations conducted by financial educators likely will employ descriptive or correlational designs, given that more sophisticated evaluation designs require funding, resources and experimental control that is commonly lacking at this level. Unless the educator

possesses high levels of knowledge about experimental and quasi-experimental designs, it is recommended that educators seek external evaluation assistance from a professional evaluator to conduct these types of evaluations.

<b>Nonexperimental Designs</b> (Descriptive, Correlational)	<b>Experimental Designs</b>	<b>Quasi-Experimental Designs</b>
<ul style="list-style-type: none"> <li>• Explores relationships among participation, implementation and outcomes</li> <li>• Does not provide evidence to suggest that the outcomes were the result of the program (attribution) or say that the program caused the outcomes (directionality)</li> <li>• Examples: post-test only, pre-post change</li> <li>• Most common for formative evaluations</li> </ul>	<ul style="list-style-type: none"> <li>• Uses random assignment to create equivalent groups</li> <li>• Compares outcomes across treatment and control groups</li> <li>• Appropriate for impact/attribution</li> <li>• Eliminates threats to internal validity</li> </ul>	<ul style="list-style-type: none"> <li>• Matched comparison sample developed instead of using random assignment</li> <li>• Compares outcomes across group who receives services and comparison group</li> <li>• Reduces threats to internal validity</li> </ul>

Another consideration is when and how often to collect data. Evaluation designs that collect data at only one time point are called a cross-sectional design. The most common cross-sectional design is to collect data only at the end of the program or intervention (post-test only). These designs limit your ability to examine changes over time in participant outcomes, however a comparison sample still can be used to explore differences between participants and nonparticipants after the program or intervention. The alternative is using a longitudinal design, meaning that evaluation data is collected at least twice or more during the evaluation. The benefit of longitudinal data collection is the ability to explore how outcomes change over time, such as comparing outcomes before the intervention (pre-test or baseline) to outcomes after the intervention (post-test).

### What type of data should be collected?

One of the most important concepts in data collection is gathering mixed methods data for triangulation and interpretation of findings. It is most beneficial to collect both qualitative and quantitative data during the evaluation so these data sources can be used in conjunction to develop a clear and accurate answer to the evaluation questions.

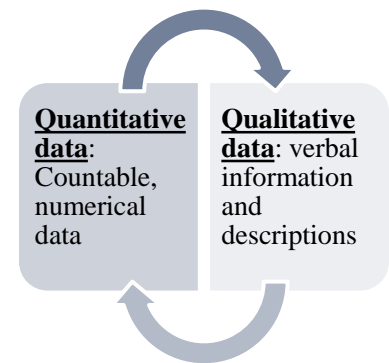
Quantitative data refers to numbers and qualitative data refers to non-numeric data such as stories, short written responses and expressions made by the participants/staff. There are strengths and weaknesses associated with both quantitative data and qualitative information. For

example, quantitative data generally provides strong evidence for program accountability purposes.

However, quantitative data is less sensitive to the unique experiences and voices of participants.

Qualitative data is useful in revealing information about unintended benefits or consequences of program participation, as well as providing insight into program strengths, weaknesses or explanations for success.

The quality of evaluation can be improved by combining both quantitative data and qualitative information to complement each other. Use of numerical data coupled with success stories is often considered one of the best methods for documenting educational program impact.



### Who should be a part of the evaluation study sample?

When all participants of a particular program or intervention take part in all the data collection for the evaluation, this is called full census. In some cases, it makes the most sense for everyone to participate in the evaluation process, particularly when the full group is small enough. However, in other instances, it is not feasible to collect data from every participant, in this case, you must select the evaluation sample. You will need to decide who is available to participate in the evaluation and how many participants are feasible based on the evaluation timeline and budget. Prior to conducting the evaluation, the educator should make a plan about who will provide data for the evaluation, and a plan to gain access to data for these participants.

### Participants' Rights and IRB Requirements

When designing evaluation tools and collecting data, special attention must be paid to protecting the rights of the participants. It is necessary to follow the human subjects governing rules and regulations to ensure that participants' privacy and freedom rights are not violated.

The Institutional Review Board (IRB) governs participants' rights as human subjects, and financial educators must follow IRB guidelines when designing evaluation data collection systems to comply with human subjects requirements.

IRB approval is necessary in three primary situations:

1. The grant or funding for your project is contingent upon IRB approval.
2. The school district where you are implementing the program requires IRB approval.
3. You intend to publish evaluation findings in a publication that requires IRB approval.

To comply with participants' privacy rights governing rules, financial educators either must ensure the confidentiality of data and information that results from the evaluation, or must collect data in a way that guarantees the anonymity of the participant. In general, to comply with IRB regulations, if financial educators plan to collect identifiable data from participants, they must receive participants' consent before collecting data and ensure the confidentiality of the data and information collected. When participants' consent is obtained, it is necessary to state that "participation in the evaluation is voluntary and the participant has the right to withdraw from the evaluation at any time without any penalty." If the confidentiality cannot be ensured, data and information should be anonymous. It is advisable to get an IRB review before evaluation tools are used to collect data and information. If the financial educator's organization does not have an Institutional Review Board, it still is necessary to ensure participants' privacy and freedom rights as put forth by the IRB.

For more information on IRB guidelines or to find an independent IRB, the following sources are useful:

- Citizens for Responsible Care and Research (CIRCARE), a nonprofit website of IRB listings
- United States Department of Health and Human Services Office for Human Research Protections (OHRP)

### What evaluation methods should be employed?

Selecting the appropriate data-gathering methods to address the evaluation questions is a major component of evaluation planning. The Data Collection Plan worksheet provided in Appendix C can be used to organize and summarize the data collection plan.

### Formative Evaluation Methods

As a reminder, formative evaluations commonly seek to clarify the presence and quality of resources, needs of the target population, and fidelity and quality of intervention activities. In addition, formative

evaluations typically center on determining and assessing the critical features of the implementation of an intervention. The question is then how to identify the most critical components of implementation to be evaluated.

Evaluation scholars have identified several critical elements for how an intervention or program is delivered (fidelity of implementation) that are relevant to many unique evaluations (Century, Rudnick & Freeman, 2010; Dane & Schneider, 1998). These components of high-quality interventions can be explored during evaluation data collection for formative evaluations. In general, these features are the critical ingredients for delivering an effective educational intervention. To select the critical components of the implementation to be evaluated, it is useful to consider what you believe to be the features of ideal implementation. The topics provided above are relevant to most educational evaluations in a broad sense, but these can be prioritized or selected based on the specific evaluation context. These topics might be included on observation protocols, and/or be asked of participants or educators on surveys or during focus groups/interviews, etc.

Exposure and Dosage	<ul style="list-style-type: none"> <li>• Attendance and participation levels over time</li> </ul>
Delivery Quality and Pedagogy	<ul style="list-style-type: none"> <li>• Method and practice of teaching and instruction</li> </ul>
Instructor Knowledge	<ul style="list-style-type: none"> <li>• Knowledge possessed by the educator in the subject matter</li> </ul>
Participant Responsiveness	<ul style="list-style-type: none"> <li>• The level of engagement in the services provided</li> </ul>
Curriculum Procedures and Adherence	<ul style="list-style-type: none"> <li>• The degree to which the educator follows the curriculum as written</li> </ul>

Specific to financial education, NEFE has developed some guidelines for what constitutes ideal implementation for financial education. NEFE created a concise list of five key factors for effective financial education that can be used to outline the critical features of program implementation for formative evaluations.

1. Well-Trained Educator: Presenter is confident, competent and knowledgeable.
2. Vetted/Evaluated Program Materials: Materials are appropriate for the audience, developed by experts, accurate and up-to-date.
3. Timely Instruction: Instruction is linked to information learners are able to readily utilize.
4. Relevant Subject Matter: Learners can relate to the topics, examples and content.
5. Evidence of Impact (Evaluation): Well-designed evaluations examine program impact.

These best practices could be indicators or components of fidelity of implementation when conducting a formative evaluation. For example, the formative evaluation of a financial education program might assess how relevant the subject matter and materials are to the audience, the level of knowledge and competence possessed by the educator, the timing of instruction compared to real-life decision-making, etc.

Different methods may be employed to evaluate these features of formative evaluations, depending on which components are most relevant to the evaluation questions. For example, if the educator is interested in dosage (or attendance), attendance records can be used to examine trends in participation. If the quality of the delivery of the intervention is of interest, observations might be used to capture trends in service delivery. Depending on the questions of interest, any of the following methodologies may be employed to answer formative evaluation questions. Two common methods for examining formative evaluation priorities are observations and dosage/attendance records.

**Observations.** Program observations provide an objective assessment of the quality and fidelity of program services. Observations can explore the content of the intervention or service models, including whether services are practical, suitable and relevant to the target audience, as well as the process of service delivery, including coverage of intervention models, adherence to intervention models, quality of services delivered, and responsiveness to or engagement in the services delivered. Typically, observations are conducted by an external person to ensure that no bias is introduced during the observation process. Similar to focus groups, an observation protocol should be designed to allow the observer to record and rate the critical evaluation indicators of interest. Observers can use the protocol to record both numerical ratings and/or written observation notes.

**Dosage/attendance records.** Program attendance, or dosage, is an important determinant of intended outcomes. For most programs or interventions, it is useful to record and analyze trends in participation to understand whether participants are exposed to enough of the financial education services or lessons to foster the intended outcomes. Attendance records should be gathered throughout the duration of the program and are typically analyzed to explore means or patterns.

### **Summative Evaluation Methods**

Because summative evaluation typically focuses on participant outcomes, it is common to assess changes over time (pre-post tests) or differences between participants and nonparticipants. Surveys, test or assessments, financial indicators, and focus groups or interviews are common data sources for summative evaluations. Information about several of the most common evaluation methodologies is provided below. This is not an exhaustive list. Although these methods are commonly used to examine outcomes, it should be noted that these methods described below also could be used in formative evaluations with different subject matter and questions.

**Surveys/Assessments.** Surveys and assessments are the most common evaluation method used by financial education educators. In formative evaluations, surveys focus on participant needs, program resources, and their perceptions of program quality. Similar to the questions used for focus groups and interviews, these items can be designed to explore participants' reactions to financial education programs. In summative evaluations, surveys and assessments can be used to explore participant outcomes by assessing knowledge, skills, attitudes, behavioral intentions, etc. Designing high-quality evaluation survey tools is a professional task and requires experience. The [NEFE Financial Education Evaluation Toolkit](#) makes it easy for financial educators to design professional-caliber questions and measurement instruments based on their local program needs, particularly focused on outcomes assessment. Educators are urged to visit [toolkit.nefe.org](http://toolkit.nefe.org) to access the online survey database.

**Focus Groups/Interviews.** Speaking with program stakeholders/participants in a more formalized manner via focus groups and interviews can provide highly detailed verbal descriptions and insights to answer the evaluation questions. Focus groups typically involve 6-8 people, and are useful for obtaining answers to evaluation questions from many participants at once, which is more time efficient than interviews. However, interviews are more appropriate in situations where sensitive questions may be asked or when participants might be influenced by the presence of other people during the process. It is useful to create a protocol or script to use for each focus group or interview to standardize the process and ensure that you are asking the same questions in the same manner across each instance. The textbox displayed here presents several example questions that could be asked of participants during focus groups or interviews. Typically, these discussions are recorded and transcribed to obtain written records that can be used to identify and organize themes.

**Document review.** In some circumstances, there are documents or other written data sources that can be used to track how the program is being implemented or to track participant outcomes. These documents may be specific to the evaluation context. For example, written lesson plans could be used to examine how many lessons were covered from a particular financial education curriculum. Document reviews can be particularly useful when there are few resources for data collection, other more intensive data collection strategies are not possible, or the evaluation is taking place after the program already has been implemented. These documents would be examined for themes or coded for numerical analysis.

#### Example Focus Group or Interview Questions:

##### Access/Participation:

- How did you first hear about this program?
- Why did you want to get involved?
- What do you think other students know about this program?
- Why do you think other students choose not to participate?

##### Needs Assessment:

- What financial education topics do you discuss at home with your parents?
- What are other sources that provide financial information in your life?

##### Implementation:

- How well do your teachers explain the topics in the financial education lessons?
- What was the most interesting lesson you remember?
- What would make the lessons more interesting?

##### Perceived Impact:

- What is the biggest thing you have learned from these financial education lessons?
- Please describe a time when you used these skills in your daily life.
- In what ways has participation in these activities changed your life?

##### Satisfaction:

- Overall, how do you like the financial education lessons?
- How useful are these skills in your life?
- What is the best part of this program/these lessons?
- What is the worst part of this program/these lessons?
- How do you think this program/these lessons could be improved overall?

## Writing or Selecting Survey Items

As financial educators commonly use surveys to assess evaluation outcomes, a special section covering the development of survey items and the selection of survey concepts is included.

The accuracy and reliability of data are essential qualities for implementing evaluation recommendations with confidence. In the context of evaluation, validity (or accuracy) and reliability both relate to errors in the data. Some errors are caused by the lack of accuracy in the data collection method or instrument (validity), while other errors are caused by problems with the consistency and stability of the measurement instrument (reliability). Therefore, special attention should be paid to ensure the accuracy and reliability of evaluation data and information. The following factors help ensure the accuracy and reliability of evaluation data, particularly for surveys, focus groups or interviews.

**Clarity of Questions.** It is common to use self-responding surveys to gather data. Therefore, evaluation questions should be written clearly and concisely to avoid confusion and help the participant answer accurately. Instructions should be clearly stated to help participants complete the survey easily. Generally, closed-ended and open-ended questions are used in evaluation instruments. If the possible response choices are provided (as in a multiple choice question), this is a closed-ended question. If the question is asked so that the respondent must use his or her own words to answer it, this is an open-ended question. When closed-ended questions are used, the educator should be sure that the answer key contains all the possible responses to prevent response errors and/or that an “other” option is included with space for the respondent to fill in his or her own response.

**Reading Level of Target Audience.** The reading level of questions is an important determinant of the accuracy and reliability of evaluation data. The reading level of the written language used to design the evaluation tool should not exceed the reading level of the target participant group to avoid potential errors in data collection. This is particularly important when working with children and youth, or those who may be learning English (ESL learners).

**Sensitive Data and Information.** Collecting sensitive information such as age, income and other financial information can be somewhat challenging because generally participants do not like to reveal this information. It is important to get this data in a way that the participant is comfortable in providing it. One approach is to present question-and-answer choices that have ranges instead of exact values of sensitive data. For example, instead of asking, "What is your annual household income?" the question might be "In what range is your annual household income?" and list the possible income categories from which the participant can choose their response.

## Selecting Survey Constructs

The survey items written or selected for the evaluation survey tool should align strongly with the outcomes displayed in the logic model. Consistent with the outcomes identified in the logic model section above, below are example survey items to explore these outcomes. Survey items falling into these categories can be found on the [NEFE Financial Education Evaluation Toolkit](#).

**Reactions/Experiences.** These survey items focus on gaining participant perspectives about their experiences in the program, including satisfaction, perceived impact, perceived relevance and more. These types of survey items are typically measured on an agreement scale (“Strongly Disagree” to “Strongly Agree”).

Example Items:

1. I would recommend this program to others.
2. The financial education lessons are interesting to me.
3. The skills I am learning in this program are useful in my life.

**Knowledge.** Knowledge change is the most common impact indicator in any financial education program, and it can be recorded by asking questions related to the learning content of the program. The educator either may use multiple choice questions or true/false questions. The true/false question format (examples below) is suitable for low-literacy audiences or younger populations.

Example Items:

1. It is a good idea to make only the minimum payments on credit cards.
2. When you must pay a bill late, it's important to call the company before the bill is due.
3. Interest rates and fees are about the same on all credit cards.

**Confidence.** The confidence to carry out a financial management tasks is a reflection of one's financial management skills. These items can be measured on an agreement scale ("Strongly Disagree" to "Strongly Agree") or on a confidence scale ("Not Confident" to "Very Confident").

Example Items:

1. I am confident I can save money regularly.
2. I am confident I can balance a checkbook every month.
3. I am confident I can reduce my personal debt.

**Attitudes.** To assess participants' attitudes, a scale can be developed using value statements related to the financial practices that the program is planning to teach. These types of survey items typically are measured on an agreement scale ("Strongly Disagree" to "Strongly Agree").

Example Items:

1. Saving money regularly is important to me.
2. Planning my personal budget is a priority.
3. Starting an emergency savings fund is important to me.

**Intention to Engage in Positive Financial Behaviors.** Survey items in this category ask respondents to report the likelihood of engaging the financial behaviors in the future, if they are not already engaging in these behaviors. The following format is appropriate to record participants' aspirations to adopt desired financial practices. These items can be assessed on a scale from "No" to "Already doing this."

Example Items:

1. As a result of this program, I plan to set a goal to get out of debt.
2. As a result of this program, I plan to keep track of my spending debt.
3. As a result of this program, I plan to pay bills on time every month debt.

**Financial Behavior Changes.** Recording participants' actual behavior change is possible only if the financial education program takes place over time. For comparison, data must be collected at least two different times to be able assess participants' actual behavior changes. In a multi-session financial education program, the educator meets the same group of participants more than once. As a result, the educator has an opportunity to record the participants' financial behavior related to the content of the program before and at the end of the program series to document changes in behavior. These items can be assessed on a scale from "I am not doing this" to "I am doing this all the time."

Example Items:

1. I keep track of my spending.
2. I pay bills on time each month.
3. I find ways to decrease my expenses.



***Financial and Economic Indicators.*** In financial education evaluations, there also are financial indicators that can be used to examine the impact of program participation. These numerical indicators may include accounting balances, ratio of income to expenses, debt, number of credit cards, payment late fees, credit card interest rates, etc.

Example Indicators:

1. How much is your credit card debt?
2. How many credit cards do you have?
3. What is the balance of your total savings?

## Part IV. UTILIZING: EVALUATION DATA USE AND CONTINUOUS QUALITY IMPROVEMENT

There is little point in spending the time, resources and energy collecting evaluation data if there is no plan to use the data. This section outlines the analysis, reporting and improvement techniques that are critical for evaluation use and continuous quality improvement.

### Part IV Section Summary

Primary Sections	Section Summary
How do we analyze evaluation data?	Calculation of percentages and means (or averages) can be used in most instances to analyze and summarize quantitative data. To present data in a clear and understandable manner, it is useful to use tables, bar charts, pie charts, line graphs or other types of data-visualization techniques. Qualitative data includes participants' responses to open-ended questions, success stories and observations made by participants. Simple summaries of qualitative data can be developed by identifying and categorizing themes and selecting quotes that describe the common themes.
How do we report our evaluation findings?	The content and format of how the evaluation findings will be reported is contingent upon the audience and the purpose of the evaluation. Evaluation findings can be reported in formal reports, presentations, press releases, newsletters, updates etc., or can be part of informal discussions among stakeholders. Key evaluation findings should be presented in a way that the stakeholders are able to understand and take action easily.
How do we use our evaluation findings?	Evaluation findings can be used for multitude of purposes, including accountability, program improvement, funding requests, communication with stakeholders and marketing. Furthermore, evaluation processes are an important component of continuous quality improvement (CQI). The CQI process is an ongoing process of planning for an intervention, implementing the intervention, evaluating the implementation and effectiveness of the intervention, and acting to make improvements based on the evaluation findings.

### How do we analyze evaluation data?

Without going into complicated data-analysis techniques, calculation of percentages and means (or averages) can be used in most instances to analyze and summarize quantitative data. Microsoft Excel or similar spreadsheet programs can be used to summarize data and conduct computations. Even if the educator is not familiar with data-analysis software, the steps shown in the following example can be used to analyze and summarize data of financial education programs. To present data in a clear and understandable manner, it is useful to use tables, bar charts, pie charts, line graphs or other types of data-visualization techniques.

### Analyzing and Summarizing Quantitative Data

**Mean of responses.** The mean (average) is calculated by adding or summing all the participants' ratings and dividing the total by the number of respondents (participants who complete data collection). For example, if the total of the ratings is T and the number of participants is N, then the mean (M) can

be expressed as T divided by N. Like the example below, you can calculate the pre-test mean and the post-test mean and compare these two values to see if the average scores have improved. If necessary, there are statistical techniques (e.g., mean difference tests) that can be used to make a determination about whether the difference in the means is statistically significant (inferential statistics).

$$M = \text{Total of Responses (T; Sum)} / \text{Total Number of Responses (N; sample size)}$$

*For Example (see data in table below):*

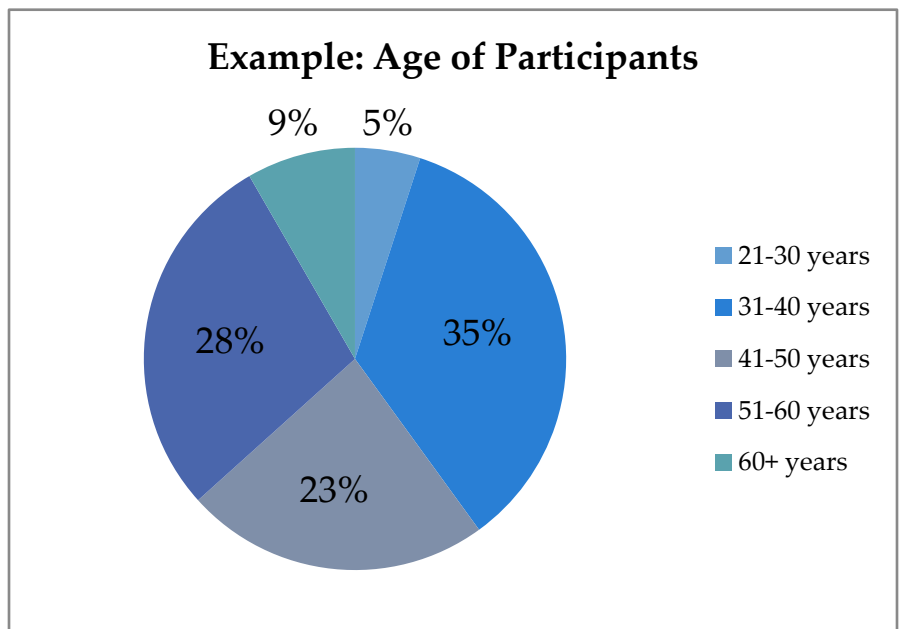
Pre-Test Mean: 691 (sum of score) / 10 participants = 69.1 points of out 100

Post-Test Mean: 886 (sum of score) / 10 participants = 88.6 points of out 100

Participant	Knowledge Pre-Test (X) (100 points)	Knowledge Post-Test (Y) (100 points)	Change in Knowledge (Y subtract X)	Change in Responses
A	65	85	+20 points	Improved
B	67	98	+31 points	Improved
C	78	78	0 points	No change
D	76	65	-11 points	Decline
E	60	100	+40 points	Improved
F	70	90	+20 points	Improved
G	60	85	+25 points	Improved
H	55	95	+40 points	Improved
I	90	90	0 points	Decline
J	70	100	+30 points	Improved
Notes:	Sum of scores = 691 Number of participants = 10	Sum of scores = 886 Number of participants = 10	Seven participants improved their scores (out of 10 participants)	

**Percent of Responses.**

Percentages can be used to express the share of participants selecting specific responses to survey items. Percentages are particularly useful for categorical data, such as demographic data, because means values do not make intuitive sense. Percentages and means can be used to summarize data such as age, income and so on. Examples of categorical responses include: gender (male/female), ethnicity (e.g., Hispanic, Caucasian, African-American), age ranges, receipt of high school diploma, etc.



**Change in Responses** (Improve, no change, or decline). For longitudinal data, or data that is collected over time, you may want to explore how the responses or data changes over time. For example, if the evaluation collects pre-test (before the intervention) and post-test (after the intervention) data, the responses from each participant can be matched and you can explore how the overall means change from pre-test to post-test for the matched sample (those who have complete both the pre-test and post-test). You also can calculate the percentage of the participants who improved their knowledge and confidence. There is no standard for how many people need to improve or how large of an improvement is needed to establish success or effectiveness of the intervention. Typically, these determinations are context-specific and can be derived from standards in published research/evaluation of similar programs.

*For Example (See data in table above):*

Number of participants who improved their knowledge: 7 out of 10 participants = 70 percent of participants improved their knowledge from before the intervention (pre-test) to after the intervention (post-test).

**Inferential Statistics.** Advanced statistical techniques can be employed to further answer the evaluation questions by examining statistical differences between groups, confirming relationships between variables, or generalizing findings to a larger population. These advanced statistics are called inferential statistics. Summarizing the great amount of information about inferential statistics is outside of the scope of this manual. Educators seeking to make statements about the “statistical significance” of their evaluation findings or make comparisons between treatment groups and control or comparison groups should seek out external evaluation assistance or learn relevant information about the appropriate statistical techniques from other sources.

### Analyzing and Summarizing Qualitative Data

Qualitative data includes participants' responses to open-ended questions, success stories and observations made by participants. There are computer programs to formally analyze qualitative data (e.g., ATLAS.ti, NVivo), but a detailed description of these computer programs is outside of the scope of this manual. However, the following steps can be used to complete a simple analysis and summary of most of the qualitative data gathered during evaluations.

- Type the question and each of the responses to the question in bulleted form.
- Review all the responses and group them into broad categories based on the content or the underlying message of the response.
- Identify each of the categories based on the underlying theme.
- Review all the categories to understand the overall message.
- Order the response categories based on the number of responses to each theme.
- Identify and summarize the most significant themes to be included in the report.
- Select descriptive quotes to describe and illustrate the significant themes.

### How do we report our evaluation findings?

The content and format of evaluation reporting are contingent upon the audience and the purpose of the evaluation. Evaluation findings can be reported in formal reports, presentations, press releases, newsletters, updates, etc., or can be part of informal discussions among stakeholders. In some cases, using multiple methods of communication helps get evaluation information to important stakeholders by tailoring communication methods to the specific audience. Regardless of the reporting format, it is

useful to identify the key findings, interpret those key findings, and take action. It may be useful to develop recommendations based on the evaluation findings. These recommendations should describe the implications of the evaluation findings and how the findings can be used to inform actions to improve the program or intervention. Additionally, follow-up feedback can be used to provide useful information to the stakeholders who were involved in the evaluation or who have a responsibility for the program. Often it is useful to create short, concise summaries of the evaluation findings in the form of executive summaries or evaluation briefs because these simplified reports are user-friendly and quick to read.

Key evaluation findings should be presented in a way that the stakeholders are able to understand and take action easily. The following guidelines are helpful to present key findings:

- Decide who will be the target stakeholders or audience of the findings.
- Determine the main purposes of the communication.
- Be clear and concise about the findings.
- Highlight major outcomes with charts, figures, tables or other visual elements.
- Interpret the major findings based on knowledge of the intervention and its participants.
- Make suggestions to improve the program.

### **How do we use our evaluation findings?**

**Accountability.** Meeting financial education needs of diverse societal groups is a challenging task because of limited resources. Therefore, financial educators must be prepared to distinguish effective financial education programs from ineffective ones. This determination can be achieved only if the educator uses program evaluation as a measure to discern effective programs. If the financial education program is effective in terms of bringing desired outcomes to the target population, the educators should continue to implement the program. Additionally, evaluation is useful as a public accountability measure to secure stakeholder support for effective financial education programs. Communication of evaluation findings with stakeholders such as funding agencies, decision makers and policymakers is essential to convince them about the importance of investing in financial education. Financial education evaluation provides a means to receive due attention and garner support from the public and policymakers.

**Funding.** Funding is essential to continue financial education programs. Funding agencies look for successful programs and are sensitive to cost effectiveness. Therefore, it is important to ensure the cost effectiveness of financial education programs. Cost effectiveness can be illustrated using evaluation data to distinguish effective programs from ineffective programs. Competition for limited funding is very high. Therefore, the educator must be prepared to present strong financial education programs as examples when applying for funding. Follow these important steps when presenting evaluation data to support continuous funding.

- Make evaluation an integral part of the program.
- Document participant reactions (e.g., satisfaction, relevance to their lives).
- Document evaluation findings about program quality to demonstrate strong implementation.
- Clearly communicate program outcomes with the funding agency.
- Communicate outcomes with potential funding agencies to seek future funding.

**Communication with Stakeholders.** Partnerships involve two or more individuals, groups or organizations working together for a common goal. When two or more partners work together, it is important that they mutually understand the program development and delivery process. If changes are

made to program delivery, all the partners should understand the rationale for those changes. Formative evaluation data can be utilized to justify the changes needed without being biased to one partner. This is an essential element to managing partnerships.

At the end of the program, partners and stakeholders normally like to share credit for the program and be informed about the program's successes. The following tips are helpful when using evaluation results for building strong partnerships:

- Keep partners informed about the evaluation plan.
- Share ongoing evaluation data about program quality with partners on a regular basis.
- Document and share outcomes with partners to highlight the worth of the partnership.
- Acknowledge the contribution of each partner.

**Marketing.** Evaluation findings also can be useful for marketing the program to potential participants or the broader community. Documenting improvements in financial education made by participants or participants' positive perceptions of the program can be persuasive for program marketing materials.

**Program Improvement.** Evaluation data can be used to inform program improvement efforts. Reviewing the evaluation findings helps the educator decide whether the program is achieving set objectives or not. If the program is not being implemented in a high-quality manner or the program outcomes are below expectation, the educator needs to identify alternatives to modify the program before presenting it next time. Program improvement can be done only if the educator has collected formative evaluation data to identify strengths and weaknesses. If the strengths and weaknesses of the program have been identified, the educator can plan alternatives to eliminate weaknesses and capitalize on strengths to make the program stronger next time (or to conduct mid-course corrections).

Use these helpful tips to use evaluation data for the improvement of educational programs:

- Compare outcomes with the program objectives and goals.
- If outcomes are below expectations, find alternatives to improve the program.
- Review strengths and participants' comments to identify alternative approaches to address weaknesses.
- Identify or develop alternatives before the next program cycle.
- Review process evaluation data such as participants' ratings of instructors and education materials.
- When there are low ratings of educational materials or instructors, modify that item or find alternatives before presenting the next program.
- Perform continuous evaluation to further improve the program. This process maximizes the cost-effectiveness of financial education.

### Continuous Quality Improvement



Evaluation processes are an important component of continuous quality improvement. Continuous quality improvement (CQI) is a systematic and ongoing process of improving programs and services. The CQI process is an ongoing cycle of planning for an intervention, implementing the intervention (do), evaluating the implementation and effectiveness of the intervention (study), and acting to make improvements based on the evaluation findings (act).

Financial educators should be engaging in systematic evaluations of the financial education services provided and using these evaluation findings to

inform future implementation of program services. This process ensures that decisions are made based on the evaluation findings (data-driven decision making) and that the program or intervention quality is improved in a proactive way, as opposed to being reactive to issues and challenges.

## APPENDICES

### APPENDIX A: Glossary of Evaluation Terms

- **Census:** The complete population of intervention recipients.
- **Continuous Quality Improvement:** The systematic process of improving programs and services through an ongoing cycle of planning for an intervention, implementing the intervention, evaluating the implementation and effectiveness of the intervention, and acting to make improvements based on the evaluation findings.
- **Cross-sectional designs:** A type of evaluation design that involves the collection and analysis of data at only one specific point in time.
- **Evaluation capacity:** An individual's or organization's ability to understand evaluation concepts, meaningfully engage in evaluation, and use the evaluation findings to improve services provided.
- **Evaluation stakeholder:** Individuals or organizations that are interested or invested in the program and the findings from the evaluation. Stakeholders typically include those involved in implementing the program, those served by the program, and intended users of the evaluation findings.
- **Experimental designs:** A type of evaluation design used to ensure equivalence of treatment and control groups to allow the evaluator to assess impact or effect. Potential participants are randomly assigned to either the treatment (group receiving services) or the control group (group not exposed to the program or treatment) to enhance the likelihood that groups are equivalent at baseline and comparisons can be made post-intervention, attributing differences between treatment and control groups to the intervention itself.
- **Formative evaluation:** A type of evaluation in which the educator explores the operations or process of a financial education intervention implementation, also referred to as process evaluation. As opposed to exploring outcomes in a summative evaluation, formative evaluation is conducted to help educators decide whether the program is meeting needs of program recipients, whether the activities implemented are of high quality, and whether any improvements are required.
- **Inferential Statistics:** A type of statistics that are used to make statements about a population based on a sample of participants and/or to make judgments about whether statistical findings are due to chance or actual differences between groups.
- **Institutional review board (IRB):** A committee appointed by the university administration composed of community and legal experts as well as scientists across departments that evaluates, approves and monitors all research projects in that institution with respect to ethical requirements and practices (less formally known as the "human participants committee"). No research involving human participation can be performed prior to IRB approval.
- **Logic model (or theory of change model):** A visual representation of the logical relationships between the resources invested, the activities that take place and the benefits or changes that result. The logic model depicts the programming process in graphical form to help clarify what should be implemented to create the changes in financial education outcomes for participants as intended.
- **Longitudinal designs:** A type of evaluation design that involves the collection and analysis of data at multiple points in time (repeated observations).



- Nonexperimental designs: An evaluation design focusing on describing the program or intervention and the associated outcomes, and exploring the correlational relationships between variables of interest. These designs are most appropriate when experimental designs are not appropriate or possible.
- Qualitative data: Verbal information or descriptions that are categorical rather than numerical, and often include attitudes and perceptions.
- Quantitative data: Countable, numerical data.
- Quasi-experimental designs: An evaluation design employing a matched comparison group instead of employing randomization to create treatment and control groups like in an experimental evaluation. As opposed to a control group, matching participants and nonparticipants on critical variables of interest is used to develop a comparison group. These designs can approximate findings from experimental designs although there is less confidence about the attribution of findings to the program or intervention.
- Reliability: Consistency and stability with which a measure assesses a given construct.
- Request for proposal (RFP): A document outlining the pertinent information about a desired future evaluation to request proposals from evaluators interested in conducting the evaluation.
- Sample: A part of a larger population of intervention recipients.
- Summative evaluation: A type of evaluation exploring the learner outcomes or achievements as a result of participation in the intervention. Summative evaluation is conducted to help the educator document the participant outcomes associated with or attributed to financial education programs. Summative evaluation provides data to understand whether or not a program is effective in promoting learning about financial education concepts, including the actual and perceived benefits associated with services.
- Triangulation: Using multiple data sources or sources of information to corroborate or complement each other to confirm the evaluation findings.
- Validity: The degree of relationship between the instrument and the construct it is trying to measure.

**APPENDIX B: Logic Model Worksheet**

Resources/ Inputs		Activities	Outputs	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes
<b>Definition</b>	<i>Resources necessary to put towards goals and support activities</i>	<i>Actions, tasks by the educator or program staff, services provided</i>	<i>Direct, tangible products of activities or services</i>	<i>Changes in participants that result from program activities</i>		
				<i>Immediately after participation</i>	<i>1-6 months after participation</i>	<i>More than 6 months after participation</i>
<b>Example</b>	<i>Educator, community center, workshop materials, supplies</i>	<i>Debt reduction workshop (four sessions)</i>	<i>Four sessions implemented, worksheets completed, materials distributed</i>	<i>Satisfaction with sessions, knowledge of budgeting, and effective spending</i>	<i>Changes in financial behaviors, use of budget techniques</i>	<i>Reduction in debt, improved credit score</i>



## APPENDIX D: Supplemental Resources

### Program Evaluation Resources

- American Evaluation Association (AEA): <http://www.eval.org>
- Centers for Disease Control (CDC) and Prevention: <http://www.cdc.gov/eval/>
- Harvard Family Research Project: <http://www.gse.harvard.edu/hfrp/>
- University of Wisconsin Cooperative Extension: Program Development & Evaluation Resources
  - Evaluation Resources: <http://www.uwex.edu/ces/pdande/>
  - Logic Model Course: <http://www1.uwex.edu/ces/lmcourse>
- W.K. Kellogg Foundation: Logic Model and Development Guide
  - <http://www.wkkf.org/Programming/Overview.aspx?CID=281>
- Western Michigan University Evaluation Center: <http://www.wmich.edu/evaluation>
  - Evaluation Checklists

### Financial Education Resources

- Consumer Financial Protection Bureau (CFPB): <http://www.consumerfinance.gov/>
  - Consumer Tools
  - Educational Resources
  - Curriculum Review Tool
  - Money as You Grow (Resources for Parents & Caregivers)
- Council for Economic Education: <http://councilforeconed.org/>
  - National Standards for Financial Literacy
- Economics Center at University of Cincinnati: <https://www.economicscenter.org/>
  - Resources for Educators & Students
  - Research, Consulting & Analysis
  - Math That Makes Cents
- Federal Financial Literacy & Education Commission: <http://www.mymoney.gov>
- Federal Deposit Insurance Corporation (FDIC):
  - Teacher Resource Center: <https://www.fdic.gov/consumers/education/torc/index.html>
  - FDIC Money Smart: <https://www.fdic.gov/consumers/consumer/moneysmart/>
- Jump\$tart Coalition: <http://www.jumpstart.org/>
  - National Standards for K-12 Personal Finance Education
- Money As You Learn: <http://www.moneyasyoulearn.org/>
  - Integrating financial education into the Common Core

- Money Teach: <http://www.moneyteach.org>
  - A community connecting financial educators to instructional resources and each other.
- National Endowment for Financial Education (NEFE): <http://www.nefe.org/>
  - High School Financial Planning Program: <http://www.hsfpp.org/>
  - CashCourse: <http://www.cashcourse.org>
  - Smart About Money: <http://www.smartaboutmoney.org>
  - Financial Workshop Kits: <http://www.financialworkshopkits.org>
  - My Retirement Paycheck: <http://www.myretirementpaycheck.org>
  - On Your Own: <http://www.onyourown.org>

